LABOURING BODIES: LIVING STANDARDS AND THE DISTRIBUTION OF FOOD IN BRITAIN, 1850-1914

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Abstract

This dissertation analyses the social relations of distribution upon which the 'production' of cheap food in Britain between 1850 and 1914 came to rest. It argues that these relations of distribution were essential to the realisation of the potential for the mass of cheap food reaching its shores after 1870. Through a study of the dynamics surrounding key actors (e.g. public markets, street sellers, shopkeepers, co-operative stores, multiples) of the food distributive chain, I demonstrate that food distribution during this period was a turning point in the political economy of food and a crucial element in rising real wages and working-class living standards. The dissertation makes two fundamental claims. The first is that the study of food cannot be reduced to quantitative measures alone and that the changing quality and physical and nutritional properties of food need to be analysed to understand people's health and well-being. My second claim is that the notion of distribution must be understood in its wider sense as a social and material process through which food is unevenly distributed in time and space amongst the members of the society and the household. In this respect, the dissertation documents the close relationship between living standards and the distribution of food, and the ways in which food is embodied in socially differentiated ways.

Pour Geneviève

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ARLGB	Annual Report of the Local Government Board
DCECA	Departmental Committee on the Employment of Children Act, 1903
DCRR	Departmental Committee on Railway rates (preferential treatment)
IDCESC	Inter-Departmental Committee on Employment of School Children
IDCPD	Inter-Departmental Committee on Physical Deterioration
LGB	Local Government Board
LCC	London County Council
PP	Parliamentary Papers
RSCR	Report from the Select Committee on Railways
RCMRT	Royal Commission on Market Rights and Tolls
RCPLRD	Royal Commission of the Poor Laws and Relief Distress
RDCMCR	Report from the Departmental Committee on Milk and Cream Regulations
RGCJB	Report relative to the grievances complained of by the journeymen bakers
RSCA1856	Report from the Select Committee on Adulteration of Food, 1856

Introduction

> By conceding to the poor so much as even the *liberty of dying from want*, the legislature of the country certainly has gone too far![1]

When the young Oliver Twist first entered the shop of Mr Sowerberry, an undertaker employed by the parish, the shopkeeper's wife immediately remarked how small he was. This 'little bag o'bones' embodied months of semi-starvation in the workhouse where the new Poor Laws made sure that he and his emaciated companions wasted their life 'without the inconvenience of too much food or too much clothing'. Charles Dickens captured in a single stroke the putrid immorality of a starving nation when he described, with chirurgical precision, Oliver's reaction after being asked if he was not 'too dainty to eat' the cold bits of meat.

> Oliver, whose eyes had glistened at the mention of meat, and who was trembling with eagerness to devour it, replied in the negative; and a plateful of coarse broken victuals was set before him.
>
> I wish some well-fed philosopher, whose meat and drink turn to gall within him; whose blood is ice, whose heart is iron; could have seen Oliver Twist clutching at the dainty viands that the dog had neglected. I wish he could have witnessed the horrible avidity with which Oliver tore the bits asunder with all the ferocity of

[1] J. Lhorky, *On Cases of Death by Starvation, and Extreme Distress among the Humbler Classes, considered as one of the Main Symptoms of the Present Disorganization of Society; with a Preparatory plan for Remedying these Evils in the Metropolis and other Large Cities* (London, 1844), p. 12.

famine. There is only one thing I should like better; and that would be to see the Philosopher making the same sort of meal himself, with the same relish.[2]

Later on our protagonist would follow the undertaker in his duties to discover the extent of the massacre daily perpetrated outside the walls of the workhouse. On one occasion Oliver and Mr Sowerberry, 'who was pretty well used to misery', entered the house of a 'pale and thin' man where lay a dead woman.

"Ah!" said the man: bursting into tears, and sinking on his knees at the feet of the dead woman; "kneel down, kneel down—kneel round her, every one of you, and mark my words! I say she was starved to death. I never knew how bad she was, till the fever came upon her; and then her bones were starting through the skin. There was neither fire nor candle; she died in the dark—in the dark![3]

Dickens's vitriolic critique of industrial capitalism and the trail of degradation and poverty that this intoxicating period of 'progress' and 'wealth' left behind was no exaggeration. Rather it struck at the heart of capital's contradictions, skilfully capturing the nature of a fractured society within which a condescending ruling elite was increasingly unwilling to take responsibility for the widespread social distress created by the consolidation of the capitalist order it supported. Paternalism itself, as the new Poor

[2] Charles Dickens, *The Adventures of Oliver Twist*, (London, 1850), pp. 3, 19-20. The book, originally published in monthly instalments from February 1837 to April 1839 in *Bentley's Miscellany*, appeared in book format for the first time in 1838, some six months before the completion of the serialisation.
[3] Dickens, *Oliver Twist*, p. 25.

Laws of 1834 made clear, once the nexus around which the old landed aristocracy found its legitimacy, was now too expensive. The accumulation of capital could not, and would not, be infringed with, and the contradictions of a system breeding poverty through unemployment, underemployment and low-wage jobs would minutely remain unaddressed.

Karl Polanyi famously depicted the Speenhamland Laws as a moment of transition between a vacillating aristocratic morality and the constitution of a 'free' labour market premised upon people's nonnegotiable market dependence.[4] The collapse of paternalistic structures and solidarities was evidenced by James Grant's lament of the aristocracy's lack of sympathy toward the suffering poor in the early 1840s. Grant was shocked by 'the wretchedness of the huts or hovels' in which the lower classes lived, 'as if they were so many pigs'. 'The quantities of food on which thousands of them subsists,' he added, 'are incredibly small; sometimes a whole family, consisting of from five to ten individuals, are compelled to live (if living it can be called) on an amount of food which would not more than suffice for a hearty meal to a person possessing an ordinary appetite'.[5] Social commentators often discovered with disbelief, and then horror, the conditions within which the working class lived.

Already distressing in the 1830s, the condition of the working-class reached new levels of wretchedness with the economic depression of 1839, which was followed by a few bad harvests. The early 1840s, which later became known as the 'hungry forties',

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[4] Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time* (Boston, Ma, 2001[1944])

[5] James Grant, *Lights and Shadows of London Life*, Vol. 1 (London, 1842), pp. 159, 163-4.

were characterised by intense human suffering of a rapidly increasing urban population dependent on the market for survival. Describing the situation in Rochdale in 1842, John Bright, a passionate member of the Anti-Corn Law League, wrote:

> No change here yet—The folks are gone at 6 in the morning to Bacup—3000 of them to turn the hands out there & on the way we had an invasion of the Town at 11 by 2000 women & girls who passed through the streets singing hymns—it was a very singular & striking spectacle—approaching the sublime—they are dreadfully hungry—a loaf is devoured with greediness indescribable, & if the bread is nearly covered with mud it is eagerly devoured.[6]

Death by starvation was alive and well in Victorian Britain. German immigrants J. Lhorky and Friedrich Engels were indeed appalled by the growing number of deaths by starvation occurring in London, Glasgow, Manchester, Bolton and other large towns, as well as by the 'hundred of thousands kept at "*the starvation point*" in our poor-houses'.[7] While Lhorky entertained no doubt that the evil extended 'its putrid and disgusting roots throughout the whole social system', he was also insistent that cases of death by starvation, understood as 'the *continued* deficiency of sustenance', occurred only on extraordinary occasions.[8] In other words, while the immediate cause of death was rarely starvation itself, chronic hunger and malnutrition were often not far behind. Lhorky stated

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[6] Norman McCord, *The Anti-Corn Law League 1838-1846* (London, 1975[1958]), p. 127.
[7] Lhorky, *On Cases of Death by Starvation*, pp. v, 4, 7. See Friedrich Engels, *The Condition of the Working Class in England* (Oxford, 2009[1845]), p. 38.
[8] Lhorky, *On Cases of Death by Starvation*, pp. 14, 2.

the case of a starving mother who killed her three-week-old baby by throwing it in the New River because her body could not produce milk for her child. In the vast majority of the cases, however, people were '*dying by inches*' from inanition, their immune system simply too weak to fight diseases.[9]

That resentment against the Corn Laws was mounting would certainly be a euphemism. The immiseration of the working-class, including agricultural labourers, whose food, cloth and dwelling Robert Bremner described, upon returning from a journey in the interior of Russia, as worse than the Russian serf,[10] furnishes the social, economic, political and cultural matrix within which the oratory skills and organisational abilities of the Anti-Corn Law League's most devout members were put to profit.[11] As the political project of the new ruling class gained traction, it received unexpected 'help' by the Great Irish Famine (1845-49). The road to modernity was not only paved with good intentions, but also with the emaciated corpses of at least one million Irish. During those years, thousands of famished Irish would die while their land would remain the 'chief purveyor' of England, exporting 'more food than any other country in the whole world'.[12] By January of 1846 the situation had become politically unbearable. 'The worst ground, on which we can fight the battle of true Conservatism,' wrote Prime Minister Sir Robert Peel, 'is *food.*'[13] While Peel himself became convinced that the Corn Laws were a hindrance to economic growth, and a threat to the established order he represented, he

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[9] Lhorky, *On Cases of Death by Starvation*, pp. p. 22, 5.
[10] Robert Bremner, *Excursions in the Interior of Russia*, Vol. 1 (London, 1839), pp. 154-6.
[11] Condemning the 'infinite duty of making money', William Dodd argued that the time spent at work to command a given quantity of provisions quadrupled between 1530 and 1840. See William Dodd, *The Laboring Classes of England* (London, 1848[1847]), pp. 30-2
[12] The Times, cited in Dodd, *The Laboring Classes of England*, p. 33.
[13] Sir Robert Peel, cited in Norman Longmate, *The Breadstealers* (New York and London, 1984), p. 217.

nonetheless understood all too well that the days of agrarian dominance in Parliament were numbered. Providing cheap food for urban areas had become essential for the business class, convinced by the precepts of classical political economists that cheap imported supplies of food and raw materials were the key to accumulation and international competitiveness. To defend the Corn Laws, or Starvation Laws as some called them, had indeed become increasingly difficult, and after years of prevarication, the Importation Act of 1846 finally repealed the Corn Laws. The Navigation Laws, which for two centuries had protected British shipping against foreign competition, were repealed in 1849.[14]

By 1854, those who could afford the imperial opulence displayed in Fish Street Hill in the form of pineapples, melons, forbidden fruit and mangoes had to share the metropolis with 'the large floating population of starving labour always to be found in the streets of London.'[15] As it happened, the great 'middle class agitation' of the late 1830s and early 1840s for repeal did not have its promises immediately fulfilled. It took at least another 25 years for living standards to show any signs of improvement, which only came with the development of the infrastructures and technologies of transportation. After all, free trade policies could only do so much, and the diminution of tariffs on imported foodstuffs was not a substitute for the lack of technological ability to supply the needs of a population that was, by 1851, predominantly urban.

Food production at home did not keep up with a rapidly expanding population dependent on the market for survival. Growing imports of grain and meat in the 1850s

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[14] Sarah Palmer, *Politics, Shipping and the repeal of the navigation laws* (Manchester, 1990).
[15] 'The London Commissariat', *The Quarterly Review*, Vol. 95 (1854), pp. 301-2.

and 1860s helped to stabilise an already deficient supply. Meanwhile, working classes continued to endure hunger, malnourishment, and starvation. By 1850, 800,000 sheep and 73,000 cattle were slaughtered and boiled down in Australia to produce 11,000 tons of tallow for export to Britain. 'Viewed in connection with the fact that there are millions 'at home' on the brink of starvation,' said Australian Dr Lang, 'this destruction is discreditable to Great Britain and her rulers, and cannot but be peculiarly offensive in the sight of Heaven.'[16] Three years later Mr Chester, delivering the centenary address of the Society of Arts, asked why Australia should be content with exporting wool and tallow to Britain, 'and not the mutton itself to the hungry masses of this country?'[17] This obsession for food was further visible in the disproportionately high number of patents taken out for the preservation of food: 22 from 1691 to 1839, 33 between 1840 and 1849, and 55 from 1850 to 1855.[18] Here was a starving nation desperately trying to conjure the forces of capitalist social property relations and enclosures through the import of the products of distant land.

On February 19, 1855, after a particularly difficult winter, bread riots exploded in Liverpool. Bread shops were cleared of their stock by a hungry mob. The *Liverpool Albion* reported that 'small gangs of desperate looking fellows have entered a number of shops and houses and demanded money'.[19] Similarly, after a particularly difficult winter, bakers' shops in the East End of London were emptied by a mob of 30 to 40 in January

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[16] James Troubridge Critchell and Joseph Raymond, *A History of the Frozen Meat Trade*, (London, 1912, p. 9.
[17] Critchell and Raymond, *A History of the Frozen Meat Trade*, p. 4.
[18] Wentworth Lascelles Scott, 'On the supply of animal food to Britain, and the means proposed for increasing it', *Journal of the Society of Arts*, Vol. 14, no. 796 (1868), pp. 263-6.
[19] *Liverpool Albion*, February 19 (1855).

1861. The next day, between seven and nine o'clock at night, thousands gathered and cleared bakers' shops and eating-houses. Outnumbered, the mounted police were powerless to stop the desperate spectacle.[20] 'The district of Old Street, Goswell Street, Barbican, and Whitecross Street', wrote a correspondent of the *Morning Post* on January 20, 1861, 'are the boundaries, in a maze of courts swarming with people in a state of starvation.'[21] According to John Hollingshead, indications of social degradation were everywhere to be seen in the metropolis. 'The metropolis', he wrote, 'is not managed, not cleansed, not relieved from the spectre of starvation which dances before us at our doors.'[22] While Hollingshead referred to the district of St. George's in the East of London 'as full of hunger, dirt, and social degradation', he also made sure to mention that the events of 1861 were not isolated cases: 'almost every winter some of the bakers' shops are stripped of their contents by the starving multitudes.'[23] 'Death of starvation rose almost to the rank of an institution, during this intoxicating epoch of economical progress, in the metropolis of the British empire', thundered Marx in his inaugural address of the International Working Men's Association in 1864.[24]

In *The Food of the People*, published a year later, Dr Brown did not hesitate to call a cat a cat: 'this great state is not without 'something rotten' within it... The plague spot, the skeleton in the closet of England, is that her people are underfed.'[25] There were 222 deaths from starvation in London in 1848 and 516 in 1857. These staggering figures,

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[20] *Morning Star*, January 18 (1861).
[21] John Hollingshead, *Ragged London* (London, 1861), p. 15.
[22] Hollingshead, *Ragged London*, p. 6.
[23] Hollingshead, *Ragged London*, pp. 62, 304.
[24] Karl Marx, *Inaugural Address and Provisional Rules of the International Working Men's Association* (London, 1864).
[25] Joseph Brown, *The Food of the People* (London, 1865), p. 2

as Hollingshead rightly pointed out, do not even start 'questioning how many of the returns under the head of "fever," ought to be classed as starvation.'[26] The wealthiest nation on earth was apparently the most morally bankrupt too. John A. Hobson reported 101 recorded deaths from starvation in England in 1880, and 34 in 1902 in London alone. There were 71 deaths by starvation in the metropolis in 1895, when the Local Board of Government (LGB) started reporting on the number of such deaths in its annual report. By 1908, when the Annual Report of the Local Government Board (ARLGB) started reporting on similar statistics for England and Wales as a whole, 125 deaths by starvation (73 in the provinces and 52 in London) were recorded, and 94 in 1912 (54 in the provinces and 40 in London).[27]

These were deaths for which a jury had specifically returned the verdict 'Death from Starvation'. As John A. Hobson aptly observed: 'This is, of course, no adequate measure of the facts. For every recorded case there will be a hundred unrecorded cases where starvation is the practical immediate cause of death.'[28] This obvious problem had long been recognised. 'Such are non-existent for any government, at least in the abstract, else this government would affix to itself the stigma of utter inefficiency, proclaim and call forth as it were its immediate *déchéance*.'[29] Engels was more direct, condemning the bourgeoisie for its cowardice and immorality.

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[26] Hollingshead, *Ragged London*, p. 189.
[27] *The Times*, November 3 (1896), p. 8; *The Times*, April 5 (1910), p. 3.
[28] John A. Hobson, *Problems of Poverty: An Inquiry into the Industrial Condition of the Poor* (London, 1913), p. 18.
[29] Lhorky, *On Cases of Death by Starvation*, p. 11.

> The bourgeoisie dare not speak the truth in these cases, for it would speak its own condemnation. But indirectly, far more than directly, many have died of starvation, where long continued want of proper nourishment has called forth fatal illness, when it has produced such debility that causes which might otherwise have remained inoperative brought on severe illness and death.[30]

There can be no doubt that official figures considerably underestimated what they pretended to measure, though it remains virtually impossible to know exactly how many people died from starvation or related causes.

William Booth, founder and first General (1878-1912) of a totally different kind of army, The Salvation Army, was all too aware that one of the most important wars in which Britain was involved was waged at home against its working class. 'Every year', thundered Booth, 'thousands of children are killed off by what is called defects of our sanitary system. They are in reality starved and poisoned, and all that can be said is that, in many cases, it is better for them that they were taken away from the trouble to come.' Booth estimated the starving population of London at 300,000, and the very poor at 609,000 in 1890.[31] Even after decades of improvement in the condition of the working class, it was not too difficult to find in the early 1900s, in certain districts, a considerable number of children who were still going to school underfed or ill fed. Indeed, in 1904 there were about 2,500 children (5 percent of the child population) in a normal state of

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[30] Engels, *The Condition of the Working Class in England*, p. 38. See William Farr, 'The Influence of Scarcities and of the High Prices of Wheat on the Mortality of the People of England', *Journal of the Statistical Society of London*, Vol. 9, No. 2 (1846), p. 158.
[31] William Booth, *In Darkest England and the Way Out* (London, 1890), pp. 14, 21.

wanting in Birmingham, and Dr Ralph Crowley's investigation from the Bradford Elementary Schools revealed that 13 percent of the children were suffering from poor or very poor nutrition. Dr Alfred Eichholz, Inspector of Schools in London, estimated that 122,000 children (16 percent) of the elementary school population of the metropolis were underfed, receiving food during the year from different charitable organisations. Similar figures for Edinburgh, Glasgow, Manchester and other large towns were not wanting.[32]

Marxist historian Eric J. Hobsbawm was certainly right when he referred to the third quarter of the nineteenth century as 'the age of capital'. For by no means was it 'the age of labour'. It remains a testimony of the ruling class's insatiable thirst for capital accumulation that the one battle that the richest and most powerful nation on earth kept on losing between 1850 and 1914 was the war on poverty. Generations of working-class people would be marked by the profound wrinkles left by insufficient food. The mass production of stunted, thin, feeble, anaemic and rachitic bodies was indeed another sign of the great 'progress' of industrial capitalism. 'We have not seen the last of the barons,' said John Bright, one of the greatest orators of the Anti-Corn Law League after the latter's victory over the landed aristocracy, 'but have taught them which way the world is turning.'[33] The working-class, too, would receive a capitalist education, and as suggested by the epigraph, the first lesson it learned was that underpinning the 'free' wage-labourer lay the freedom to starve.

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[32] 'Inter-Departmental Committee on Physical Deterioration' [hereafter IDCPD], Vol. 2, *Parliamentary Papers* [hereafter *PP*] XXXII.145 (1904), Q. 476 (Eichholz), Q. 13,039 (Hawkes), QQ. 13,246, 13,282-3 (Airy); 'Royal Commission on Physical Training (Scotland)', Vol. 1, *PP* XXX.1 (1903), Appendix 9, pp. 76-100; Margaret Alder, *Child Life and Labour* (London, 1908), pp. 84, 98.

[33] Longmate, *The Breadstealers*, p. 224.

The Standard of Living Debate, c.1770-1850

Few questions in the British historiography have yielded as much controversy and preoccupied historians and scholars for so long as the debate over living standards during the Industrial Revolution, which roughly spans the period 1770 to 1850.[34] While the living standard debate is situated outside the scope of the present dissertation, which focuses on the 1850-1914 period, a short survey of the overall evolution of the debate is important to clarify the scope, relevance, and contributions of my argument. First, one of the key issues of the debate has been the slow but consistent clarification of the different elements that comprise the living standard. How do we measure living standards? What factors are relevant in assessing well-being? As one might suspect, different authors located within dissimilar theoretical and historical traditions have quite differently answered these questions. Second, the living standard debate is also significant because it has fundamentally framed the ways in which Britain's post-1850 development has been narrated and accounted for. This is particularly the case given that the debate has been almost entirely shaped by economic historians, with most – if not all – of the major contributions published in the pages of key economic history journals, especially *The Journal of Economic History*, *The Economic History Review* and, to a lesser extent, *Explorations in Economic History.* As a result, many assumptions of the debate have seeped into the literature over rising standards of life after 1850.

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[34] For different surveys of the debate, see: Eric J. Hobsbawm, *Labouring Men. Studies in the History of Labour* (London, 1964); Ronald M. Hartwell, *The Industrial Revolution and Economic Growth* (London, 1971); A. J. Taylor, ed. *The Standard of Living in Britain in the Industrial Revolution* (London, 1975); Stanley L. Engerman, 'Reflection of 'The Standard of Living Debate': New Arguments and New Evidence', in *Capitalism in Context: Essays in Economic Development and Cultural Change in Honor of R. M. Hartwell*, ed. John A. James and Mark Thomas (Chicago, 1995), pp. 50-79.

The living standards debate opposed the modern or *optimistic* school to the classical or *pessimistic* interpretation.[35] Against the pessimistic view held by Ricardo, Malthus, Engels and Marx, among others, the optimists argued that the Industrial Revolution marked a period of substantial improvement in working-class living standards.[36] Of course, the operative word of the revisionist challenge is 'substantial'. To be sure, the debate was hardly neutral and reflected the growing divide between communist and bourgeois intellectuals. The rise in anti-capitalist sentiments after the October Revolution of 1917 saw the emergence of the optimistic school as a way to 'rescue' the bourgeois ideological edifice from the idea that economic development was indeed compatible with human underdevelopment. The general evolution of the debate is probably better seen as the slow but constant undermining of the 'optimist' view, with the emergence of a series of 'paradoxes' representing as many singular historical difficulties muddling the clear theoretical water of the optimists.

The optimistic view received its most important contribution in 1983 with the super-optimistic Peter Lindert and Jeffrey Williamson. According to the authors, the

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[35] John L. Hammond, 'The Industrial Revolution and Discontent', *The Economic History Review*, Vol. 2, No. 2 (1930), pp. 215-28; Eric J. Hobsbawm, 'The British Standard of Living 1790-1850', *Economic History Review*, Vol. 10, No. 1 (1957), pp. 46-68; Eric J. Hobsbawm, 'The Standard of Living during the Industrial Revolution: A Discussion', *The Economic History Review*, New Series, Vol. 16, No. 1 (1963), pp. 119-34.

[36] John H. Clapham, *An Economic History of Modern Britain: The Early Railway Age, 1820-50* (Cambridge, 1939[1926]); Thomas S. Ashton, 'The Standard of Life of the Workers in England, 1790-1830', *Journal of Economic History*, Vol. 9, Supplement (1949), pp. 19-38; Friedrich A. Hayek, ed., *Capitalism and the Historians* (Chicago, 1954); Ronald M. Hartwell, 'Interpretations of the Industrial Revolution in England: A Methodological Inquiry', *Journal of Economic History*, Vol. 19, No. 2 (1959), pp. 229-49; Ronald M. Hartwell, 'The Rising Standard of Living in England, 1800-1850', *The Economic History Review*, New Series, Vol. 13, No. 3 (1961), pp. 397-416; Ronald M. Hartwell, 'The Standard of Living', *The Economic History Review*, New Series, Vol. 16, No. 1 (1963), pp. 135-46; M. W. Flinn, 'Trends in Real Wages, 1750-1850', *The Economic History Review*, New Series, Vol. 27, No. 3 (1974), pp. 395-413; G. N. Von Tunzelmann, 'Trends in Real Wages, 1750-1850, Revisited', *The Economic History Review*, New Series, Vol. 32, No. 1 (1979), pp. 33-49.

average real wages of adult male English 'blue collar' workers stagnated during the 1780s and early 1790s, declined during the Napoleonic Wars, and then 'nearly doubled' between 1820 and 1850. Thus, while real wages increased by over 86 percent between 1781 and 1851, substantial and sustained improvement in the standards of living only came in the last three decades of this 70 years period.[37] The authors further argued that such a rise in real wages was sufficiently important to offset 'qualitative' dimensions such as unemployment, disamenities of urban life (e.g. overcrowding, health problems, lack of sanitation) and the inclusion of the work and earnings of women and children, therefore remaining 'large enough to resolve most of the debate over whether real wages improved during the Industrial Revolution.'[38] Since 'the average worker was much better off in any decade from the 1830s on than in any decade before 1820', Lindert and Williamson confidently concluded that the pessimists' case was in great 'need for redirection and repair' and that it 'must be shifted to the period 1750-1820 to retain its central relevance.[39]

Nicholas F. R. Crafts has criticised Lindert and Williamson's cost-of-living index by emphasising the inherent fragility and sensitivity of the different indices given the comprehensive paucity of evidence of family budgets, deficient price data series in the case of specific items such as rent and clothing, and the inability to weigh the indices

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[37] Peter H. Lindert and Jeffrey G. Williamson, 'English Workers' Living Standards during the Industrial Revolution: A New Look', *The Economic History Review*, New Series, Vol. 36, No. 1 (1983), pp. 11, 24.
[38] Lindert and Williamson, 'English Workers' Living Standards', p. 12. On the issue of urban disamenities, see: Jeffrey G. Williamson, 'Urban Disamenities', *Journal of Economic History*, Vol. 41 (1981), pp. 75-83; Jeffrey G. Williamson, 'Was the Industrial Revolution Worth It? Disamenities and Death in 19th Century British Towns', *Explorations in Economic History*, Vol. 19 (1982), pp. 221-45.
[39] Lindert and Williamson, 'English Workers' Living Standards', pp. 12, 1-2.

constituting real wage calculation according to family size, income level or region,[40] his more pessimistic estimates of trends in average real wages after 1820 nonetheless support Lindert and Williamson's overall argument of a marked rise in real wages between 1820 and 1850. While the most important effects of Crafts' critique has been to force Lindert and Williamson to revise their previous cost of living estimates for average real wages as an increase from 1.87 percent per year to 1.51 percent per year,[41] both Crafts' estimates and Lindert and Williamson's revisions do not challenge the view of substantial improvement after 1820. While the debate over these figures might initially seem pedantic, at issue here, as well as in the living standards debate in general, of course, was whether the rise and expansion of capitalism substantially improved working class life or rather, devastated and demeaned it.

For anybody acquainted with British social history, the optimistic account of robust improvement in well-being during the Industrial Revolution has never fit very well with the mounting political tensions and social unrest plaguing Britain before 1850. The Captain Swing protests, food riots, the radicalism of Luddism and the emergence of the Anti-Corn Law League and Chartism are significant historical examples that do not correspond to the optimistic view. While it discredits the writings of novelists and social commentators such as Carlyle, Disraeli, Dickens, Gaskell and Engels as completely out of touch with reality, it also minimises the horrific conditions of the working-class reported in Blue Books and countless other official and unofficial reports and statistical

[40] Nicholas F. R. Crafts, 'English Workers' Real Wages During the Industrial Revolution: Some Remaining Problems', *The Journal of Economic History*, Vol. 45, No. 1 (1985), pp. 139-44.
[41] Peter H. Lindert and Jeffrey G. Williamson, 'English Workers' Real Wages: Reply to Crafts', *The Journal of Economic History*, Vol. 45, No. 1 (1985), pp. 145-53.

surveys decrying unsanitary urban environment and widespread poverty. More importantly, however, it marginalises the extent of people's suffering and the ways in which life was actually lived, substituting violent quantitative abstractions for qualitative inquiry about daily life.

Encouragingly, the optimists' method of reducing living standards and well-being to abstract quantitative measurement has recently received what I consider to be a deadly critique. As I document in this section, the optimists' position has been widely discredited by evidence that, at best, reveals a very different portrait of the British population, and at worst, invalidates it. Indeed, in recent decades, and particularly since the late 1970s, it has become increasingly obvious to historians and scholars that too narrow a focus on incomes and wages tends to ignore a whole series of factors essential to any serious assessment of people's overall living conditions. Scholars have shifted their attention from incomes as an 'input' measure of living standards to biological factors as an 'output' to general well-being. Biological indicators such as height, life expectancy and infant mortality, have generated much enthusiasm over the last decades, while greatly enhancing our knowledge about how people actually lived. A brief review of this evidence will help to clarify the strength of the pessimist approach, which is extended and deepened by my study.

One of the earliest contributions in this regard came from anthropometric historians. Yet, family budgets and consumption statistics were scarce, and soon it was realised that adult height, as a measure of completed growth, could be a replacement for nutritional status. The pioneering study in anthropometric history came with the

publication of *Height, Health and History* by Roderick Floud, Kenneth Wachter and Annabel Gregory in 1990. Using military recruiting data, the authors reported a decline in the average height of successive birth cohorts of British army recruits between 1820 and 1840.[42] This conclusion was upheld by Paul Riggs in the case of Scottish men and women, and evidence from criminal height records in England and Wales also demonstrated a fall in average height between 1812 and 1857.[43] Stephen Nicholas and Deborah Oxley's study of English convict women transported to Australia between 1826 and 1840 revealed that average height and literacy rates fell for those who grew up as child or adolescent or both between 1795 and 1820. 'During the early years of industrialization,' the authors conclude, 'our data on height and literacy indicate that English women experienced falling living standards.'[44] Nicholas and Oxley's conclusion is important in that it reminds us of the intrinsic limits of real wages indexes constructed from incomplete records based on male wages in leading sectors. Other scholars have similarly documented stagnant and even declining average adult heights before 1820.[45] Anthropometric historians' broad agreement that the period after 1820 saw a net decline

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[42] Roderick Floud, Kenneth Wachter and Annabel Gregory, *Height, Health and History: Nutritional Status in the United Kingdom, 1750-1980* (Cambridge, 1990), pp. 136-54.

[43] Paul Riggs, 'The Standard of living in Scotland 1800-1850', in *Stature, Living Standards and Economic Development: Essays in Anthropometric History*, ed. John Komlos (Chicago, 1995), pp. 70-3; Paul Johnson and Stephen Nicholas, 'Male and Female Living Standards in England and Wales, 1812-1857: Evidence From Criminal Height Records', *The Economic History Review*, New Series, Vol. 48, No. 3 (1995), pp. 470-81.

[44] Stephen Nicholas and Deborah Oxley, 'The Living Standards of Women during the Industrial Revolution, 1795-1820', *The Economic History Review*, New Series, Vol. 46, No. 4 (1993), pp. 746.

[45] Stephen Nicholas and Richard H. Steckel, 'Heights and Living Standards of English Workers During the Early Years of Industrialization, 1770-1815', *The Journal of Economic History*, Vol. 51, No. 4 (1991), pp. 937-57; John Komlos, 'The Secular Trend in the Biological Standard of Living in the United Kingdom, 1730-1860', *The Economic History Review*, New Series, Vol. 46, No. 1 (1993), pp. 115-44.

in the average height of the British population is an important challenge to the optimist view of a substantial rise in living standards.

Mortality rate is another important biological indicator that can be used as an index of living standards. Edward A. Wrigley and Roger Schofield have estimated that life expectancy at birth in England, which was about 36.1 years between 1757 and 1801, had increased to about 40 years in the mid-1820s, before stagnating until the 1870s.[46] This is consistent with Robert Woods' recent estimates.[47] Simon Szreter and Graham Mooney's most recent estimations of life expectancy at birth suggest a sharp deterioration during the second quarter of the nineteenth century, a prolonged period of stagnation during the 1850s and 1860s, and the beginning of improvement only in the 1870s.[48] Such findings are in line with local and regional studies. In the town of Carlisle, for instance, historian W. A. Armstrong documented rising mortality rates between the 1780s and the 1840s, with death rates being 16-21 percent higher for those aged 0-4 and about 25 percent higher for adults aged 15 and over.[49] Similarly, R. A. Cage's study of Glasgow did not suggest any improvement in the city's working-class population, particularly for the majority of unskilled workers. Falling real wages combined with overcrowding, rising death rates and lower nutritional diets. Housing densities rose from 3.82 people per house in 1801 to 5.23 people per house in 1841, and the crude death rates increased from about

[46] Edward A. Wrigley and Roger Schofield, *The Population History of England 1541-1871: A Reconstruction* (Cambridge, 1981), pp. 230-6, 529.
[47] Robert Woods, 'The Effects of Population Redistribution on the Level of Mortality in Nineteenth-Century England and Wales', *The Journal of Economic History*, Vol. 45, No. 3 (1985), p. 650.
[48] Simon Szreter and Graham Mooney, 'Urbanization, Mortality, and the Standard of Living Debate: New Estimates of the Expectation of Life at Birth in Nineteenth-Century British Cities', *The Economic History Review*, New Series, Vol. 51, No. 1 (1998), p. 104, Table 6.
[49] W. A. Armstrong, 'The Trend of Mortality in Carlisle between the 1780s and the 1840s: A Demographic Contribution to the Standard of Living Debate', *The Economic History Review*, New Series, Vol. 34, No. 1 (1981), p. 103.

25 in 1821-4 to 40 in 1845-9.[50] According to Szreter and Mooney, life expectation at birth in Glasgow fell from 35 years in 1821 to 32.1 years in 1861, with a historical low at 27.3 in 1837-41.[51] In 1904, Dr Chalmers gave evidence showing that life expectancy for both men and women in Glasgow peaked in 1821-27, dropping dramatically by over five years in the 1830s, and it was not until the period 1881-90 that life expectancy would finally catch up with the 1821-27 figures.[52] Just as in the case of height, the fact that life expectancy at birth stagnated and even declined during the second quarter of the nineteenth century seriously undermines the optimists' view that there was a substantial rise in living standards.

Because it tends to capture environmental factors, wealth distribution between social classes and the social impacts of urban disamenities on public health, infant mortality has also come to be considered a valuable biological indicator that can serve as an index of living standards.[53] Paul Huck's study of infant mortality from nine parishes in the industrial North of England – Handsworth, Walsall, West Bromwich and Sedgeley in Staffordshire, Armley on the outskirts of Leeds in the West Riding, and Wigan, Great Harwood, Denton and Ashton-under-Lyne in Lancashire – do not support the view of a

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[50] R. A. Cage, 'The Standard of Living Debate: Glasgow, 1800-1850', *The Journal of Economic History*, Vol. 43, No. 1 (1983), pp. 175-82. See also: R. A. Cage, *The Working Class in Glasgow, 1750-1914* (Beckenham, 1987).

[51] Szreter and Mooney, 'Urbanization, Mortality, and the Standard of Living Debate', p. 96, Table 5;

[52] IDCPD, Vol. 3, *PP* XXXII.655 (1904), Appendix 11, Table A, p. 24.

[53] Morris D. Morris, *Measuring the Conditions of the World's Poor: The Physical Quality of Life Index* (New York, 1979); Michael Haines, 'Inequality and Childhood Mortality: A Comparison of England and Wales, 1911, and the United States, 1900', *The Journal of Economic History*, Vol. 45, No. 4 (1985), pp. 885-912; Robert I. Woods, Patricia A. Watterson and John H. Woodward, 'The Causes of Rapid Infant Mortality Decline in England and Wales, 1861-1921, Part I', *Population Studies*, Vol. 42, No. 3 (1988), pp. 343-66; Robert I. Woods, Patricia A. Watterson and John H. Woodward, 'The Causes of Rapid Infant Mortality Decline in England and Wales, 1861-1921, Part II', *Population Studies*, Vol. 43, No. 1 (1989), pp. 113-32.

substantial improvement in people's conditions of life before midcentury.[54] Huck's findings are of crucial importance because they demonstrate that infant mortality rose by 13-4 percent between 1813 and 1846 in parishes situated in the heartland of the industrial revolution, therefore seriously undermining the optimists' case. As Huck remarked, one of the striking features of recent contributions to the living standard debate has been documentation of the growing disparities between rising real wages after 1820 on the one hand, and the lack of evidence that working-class conditions were improving on the other.[55] Huck's assessment confirms John C. Brown's view of the cotton Northwest of England, which comprises Lancashire, Yorkshire, Cheshire and Derbyshire. Once we factor in the nuisances occasioned by unplanned urbanisation and the economic hardship experienced by a declining domestic handloom sector against rising power-loom weavers, the conditions of life between 1806 and 1850 for those employed in the cotton textile industry show little, if any, improvement. According to Brown, 'there was virtually no improvement in living standards in cotton textiles until at least the 1840s and for perhaps the entire first half of the nineteenth century.'[56] This claim is in line with John K. Walton's social history of Lancashire and the lack of any general improvements before 1850.[57] In Bath, Somerset, situated in the southwest of England, real wages were

[54] Paul Huck, 'Infant Mortality and Living Standards of English Workers During the Industrial Revolution', *The Journal of Economic History*, Vol. 55, No. 3 (1995), pp. 528-50.
[55] Huck, 'Infant Mortality', p. 547
[56] John C. Brown, 'The Condition of England and the Standard of Living: Cotton Textiles in the Northwest, 1806-1850', *The Journal of Economic History*, Vol. 50, No. 3 (1990), pp. 612-3.
[57] John K. Walton, *A Social History of Lancashire, 1558-1939* (Manchester, 1985), Chap. 9. See: Richard K. Fleischman, *Conditions of Life Among the Cotton Workers of Southeastern Lancashire, 1780-1850* (New York, 1985).

declining between 1780 and 1850, and it was reported that over a third of the working-class lived in poverty in the mid-1830s.[58]

A few years after Lindert and William's intervention, Joel Mokyr published an article in which he demonstrated that per capita consumption of sugar, tea and tobacco stagnated during the first half of the nineteenth century.[59] Moreover, it has been estimated that beer consumption dropped by 33 percent during the same period, and wine 41 percent.[60] This is rather perplexing in the context of rising incomes. 'If most workers were earning more in real terms,' asked Mokyr, 'what were they spending it on?'[61] As it happened, Mokyr's original contribution reached its paroxysm with the 'discovery' of the 'British food puzzle' by the optimists Gregory Clark, Michael Huberman and Peter H. Lindert. Starting from the apparently unshakable premise of robust per capita income between 1770 and 1850, the authors note:

> With even a modest income elasticity of demand for food, these income and wage measures imply a substantial growth in food demand per person. Yet when we look at the supply of *foodstuffs*, here meaning the food materials generated by domestic farm production and by net imports, a puzzle appears. Three different

[58] R. S. Neale, *Bath: A Social History 1680-1850, or A Valley of Pleasure, yet a Sink of Iniquity* (London, 1981), pp. 79-94. See also: R. S. Neale, 'The Standard of Living, 1780-1844: a Regional and Class Study, *The Economic History Review*, New Series, Vol. 19, No. 3 (1966), pp. 590-606.
[59] Joel Mokyr, 'Is There Still Life in the Pessimist Case? Consumption during the Industrial Revolution, 1790-1850', *The Journal of Economic History*, Vol. 48, N. 1 (1988), pp. 69-92. See also: Joel Mokyr, 'Has the Industrial Revolution been Crowded Out? Some Reflections on Crafts and Williamson', *Explorations in Economic History*, Vol. 24, No. 3 (1987), pp. 293-319.
[60] John Burnett, *Liquid Pleasures: A Social History of Dinks in Modern Britain* (London, 1999), pp. 57-8.
[61] Joel Mokyr, 'Is There Still Life in the Pessimist Case?', p. 91.

methods of estimating foodstuff supplies per caput show that these stagnated or even declined. This is the food puzzle.[62]

This is, of course, no small conundrum for the optimist position. One can further appreciate the difficulty given that most working-class labourers during this period would have spent on average 70 percent of their incomes on food. The authors propose some partial solutions, which, they suggest, might help to account for the food expenditure puzzle.[63] But these were far from a convincing way out of the contradiction. In short, recent scholarship has overwhelmingly demonstrated that the optimist paradigm has reached its explanatory limits and must be abandoned.

This realisation has serious consequences for studies of food and subsequent periods of British history. Significantly, one of the most prominent proposed solutions to the food puzzle is the notion that in spite of stagnant food supplies, food consumption may have risen by up to 13 percent because people spent a higher proportion of their food bill on value-added services such as food transport, processing and marketing. While the authors do not engage with the vast literature on food retailing and adulteration, their proposed solution does not change the fundamental nature of the problem. In other words, that the share of the food bill taken by agriculture and net imports diminished while the share contributed by other sectors of the economy increased does not alter the fact that foodstuff per capita at best stagnated between 1770 and 1850. Because this first

[62] Gregory Clark, Michael Huberman and Peter H. Lindert, 'A British food puzzle, 1770-1850', *The Economic History Review*, New Series, Vol. 48, No. 2 (1995), p. 215.
[63] Clark, Huberman and Lindert, 'A British food puzzle', pp. 234-5.

solution does nothing to save the optimist case from the contradiction exposed by the food puzzle, the authors introduce a second solution. Starting from the historically untenable neoclassical assumption of market equilibrium, the authors suggest that a 'potentially major explanation of why food demand stagnated' between 1770 and 1850 was that people decided to spend their rising income on cheaper fuel, clothing and sugar and tea.

> To what extent did nineteenth-century Britons reduce their total food demand because they were more warmly dressed, and lived in better heated homes? While price elasticities between food and non-foods usually appear low, the cheapening of fuel and clothing was so great that we tentatively suggest that it should be explored as a potentially major explanation of why food demand stagnated in the face of rising real incomes. ... The shift to cheap sugar and tea could have cut total food consumption to the extent that these served as appetite suppressants.'[64]

That the optimists' case is completely disconnected from the reality which they pretend to describe is captured in their assertion that 'Londoners and industrial workers chose a less nutritious diet'![65] But the individualisation of the problem will not do. First, their argument suffers from serious historical flaws given their striking failure to engage with Mokyr's demonstration that per capita consumption of tea and sugar more or less stagnated during the first half of the nineteenth century. Second, the authors' failure to

[64] Clark, Huberman and Lindert, 'A British food puzzle', p. 234.
[65] Clark, Huberman and Lindert, 'A British food puzzle', p. 234.

engage with the increasingly widespread adulteration of food and drink from the 1790s onwards is also problematic given the nature of their proposed solutions. Finally, the fact that the authors take no account of previous scholarship on biological indicators is also suspicious.

Once we take all these different aspects into consideration, the argument put forward by Clark, Huberman and Lindert leads to the untenable conclusion that British people's rising mortality rates, declining heights, lower nutritional achievement and poorer health during the first half of the nineteenth century were the result of a widespread working-class phenomenon of economically rational and consciously self-inflected low nutritional standards. Such a phantasmagorical argument and the individualistic and moralising explanation that it promotes undermine the illusion of objectivity contained in the optimists' quantitative approach to living standards, while betraying the paradigm's ideological bias towards a sanitised conception of industrial capitalism in spite of mounting evidence to the contrary. The optimistic view has reached its limits as it explains more and more about less and less. To be sure, the authors are insistent that their different 'solutions' to the British food puzzle are only tentative. Yet, it would be my argument that the food puzzle only exists in the optimists' mind and their incapacity to put into question the shaky pillar around which their theoretical and historical edifice is built, that is of a substantial rise in real wages after 1820.

Charles H. Feinstein has recently constructed a new series based on 'more reliable and more comprehensive series for earnings and prices.' 'The main conclusion of the present estimates', said Feinstein, 'is thus that over the 75 years from 1778/82 to 1853/57

the increase in real weekly earnings, allowing for unemployment and short-time working, was less than 30 percent, irrespective of whether or not Ireland is included with Great Britain.'[66] Once we take into consideration the adulteration of food and drink, the rising number of dependants, the decline in relief expenditure with the Poor Law Amendment Act of 1834 and the effects of urban disamenities (e.g. dilapidated dwellings, overcrowding, lack of sanitation, low public health), however, Feinstein estimates that the growth in average real income of the working class family between the 1780s and 1850s is reduced from about 30 percent to 10-15 percent. As Feinstein concludes:

> A turning point in living standards in midcentury rather than 1820 is also more obviously consistent with the extent of industrial and political unrest among workers from the 1810s to the 1840s, so far as that can be explained by their economic circumstances. ... The present account of trends in living standards also seems more plausible in relation to other indicators of well-being. It accords better with the evidence of a sharp deterioration in infant and child mortality. It eliminates the paradox of the decline in nutritional status indicated by the early nineteenth-century height data occurring at a time of an allegedly swift advance in living standards. It goes a long way to resolve the recently discovered "food puzzle" created by the apparent coincidence of large gains in per capita income

[66] Charles H. Feinstein, 'Pessimism Perpetuated: Real Wages and the Standard of Living in Britain during and after the Industrial Revolution', *The Journal of Economic History*, Vol. 58, No. 3 (1998), pp. 631, 649. For earlier contributions, see: Charles H. Feinstein, 'The Rise and Fall of the Williamson Curve', *The Journal of Economic History*, Vol. 48, No. 3 (1988), pp. 699-729; Charles H. Feinstein, 'Changes in Nominal Wages, the Cost of Living and Real Wages in the United Kingdom over Two Centuries, 1780-1990', in *Labour's Reward, Real Wages and Economic Change in 19th and 20th-Century Europe*, ed. Peter Scholliers and Vera Zamagni (Aldershot, 1995), pp. 3-36.

> with stagnant or declining per capita supplies of foodstuffs. ... By contrast, the present estimates leave plentiful scope for the experience of that large group of workers below the average whose position has constantly sustained the case of both contemporary and modern pessimists, while still providing enough progress from the 1820s onwards for the above-average advances of the most fortunate workers who supported the case of moderate optimists.[67]

The strength of Feinstein's intervention is that, contrary to the optimists' tendency to ignore history when it does not fit their theory, his new estimates actually makes sense of people's reality as it was lived, while leaving ample room for sectorial and regional variations.

To the extent that optimists held the view that standards of living for the average working-class family had been substantially rising, particularly after 1820, then it seems hard to deny that their original challenge to the traditional interpretation of the Industrial Revolution has failed entirely. The origin of this downfall is not difficult to find. As a Marxist historian, Eric J. Hobsbawm was always very sensitive to the importance of social history and the more qualitative or sociological aspects of the living standard debate. Although an economic historian himself, Hobsbawm was not impressed by the optimists' more economistic turn, arguing instead that economic history was not – and should not be – incompatible with sociological approaches and that to synthesise

[67] Charles Feinstein, 'Pessimism Perpetuated', pp. 651-2. Robert C. Allen's recent indices of real wages also suggest that increases in real wages before 1850 were small. See: Robert C. Allen, 'The Great Divergence in European Wages and Prices from the Middle Ages to the First World War', *Explorations in Economic History*, Vol. 38, No. 4 (2001), pp. 411-47.

qualitative and quantitative accounts of historical change was a more promising approach to robust historical knowledge. Contrary to the more nuanced approach of earlier optimists like Clapham and Ashton, the whole tradition of optimistic economic historians after 1950 has largely remained uninterested in social history, preferring to focus instead on a very narrow – though important – set of factors, most particularly real wage indexes and aggregate consumption figures. It is no small irony that the growing obsolescence of the optimistic argument by the end of the 1990s had essentially come from a series of qualitative studies on the sociology of industrialisation and situated at local and regional levels. There is no substitute for a historically informed and socially nuanced analysis about how people actually lived.[68] In this respect, Hobsbawm's portrayal of the optimists' sociology of industrialisation as 'extremely primitive' was prescient as it indeed proved to be the optimists' Achilles' heel.[69]

It is important to address here the possibility that it might also be argued that Feinstein's new estimates, while leaving the optimists' case for dead, also undermines the pessimistic view of a substantial decline during the industrial revolution. Part of the problem here, and this is a misconception that has been reproduced over the years, is the failure to distinguish between quantitative and qualitative approaches to well-being. This confusion is particularly acute on the optimist's side given the primitiveness of their sociological tools. It is precisely this lack of appreciation for a nuanced approach to social and economic change and development that has led many optimists to wrongly label Hobsbawm as an 'extreme' pessimist.

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[68] R. S. Neale, *Writing Marxist History* (Oxford, 1985).
[69] Hobsbawm, 'The Standard of Living during the Industrial Revolution', p. 129.

> The case for some deterioration is plausible for the period from the middle 1790's to the early or middle 1840's, but in the absence of some evidence which might well upset it (for instance, figures for per capita meat consumption in the provinces analogous to those we have for London), it remains no more than plausible. Very possibly the absence of evidence will never allow us to settle the matter conclusively, and the argument that real incomes remained roughly stable will commend itself as the most acceptable formula. ... But while the careful student of poverty can only say that the case for deterioration, while not implausible, cannot be proved, though that against a marked improvement is extremely strong, the sociological argument for deterioration is far more powerful.[70]

These two passages capture well Hobsbawm's more nuanced approach to history and the productive dialectical tension that he maintained between quantitative and qualitative evidence. Whereas he argued that the case for deterioration from a sociological perspective could find strong historical evidence, he also recognised the limits of historical knowledge at the time and the lack of reliable and comprehensive figures on the evolution of real wages across time and space. At any rate, the issue for Hobsbawm as for any serious social and economic historian was always to highlight the extent to which the

[70] Hobsbawm, 'The Standard of Living during the Industrial Revolution', pp. 120, 128.

optimists' notion of substantial and sustained improvement was so out of touch with history as to be extremely unlikely. He was right.

Finally, there is another dimension to the ongoing confusion that has surrounded the debate over the years that needs to be briefly mentioned. This issue was powerfully exposed in Edward P. Thompson's *The Making of the English Working Class* and its emphasis on the evils of rapidly expanding, unplanned urban environment and the filth and squalor and diseases associated with such transition. As Angus Hone wrote in 1966:

> the vast mass of the people in the England of Gregory King had been living at the point of subsistence but they had possessed compensation in their work. Their children were not subjected to the perils of crawling between the moving parts of machinery or opening and shutting the doors of air passages in the coalmines. They themselves had known traditional holidays and had not known the racking landlords, the jerry-builders and truck shops, who received them into the new towns of the industrial revolution. The food had not been adulterated, the beer had not been watered, the butter had been fresh and not rancid and it had not been difficult to get milk for young children who had just been weaned. No capitalist historian has ever claimed that the water was not stinking with sewage and industrial effluence or that the air was not contaminated with smoke, soot and grime. This represented an absolute deterioration in the conditions of life of the

> English working class, and it is this part of Edward Thompson's argument that should be emphasised – not the scholarly wrangles over the cost of living.[71]

This is something that the optimists' quantitative mind cannot grasp, and Hartwell's condemnation of the vagueness of Hobsbawm's expression like 'spiritual sense of loss' or 'the extraordinary depth, desperation and bitterness of the social discontent' exemplifies the perplexity of the optimistic when confronted with the social and cultural dimensions resisting quantification.[72] By presupposing what needs to be explained, the optimists project their analytical categories onto historical realities with radically different approaches to what constitute the standards of living.

This was indeed one of Thompson's most important methodological points, namely that people's well-being, especially in times of profound change, could not be measured according to predefined economic boxes, and needed to be apprehended through a careful reconstruction of the historical context within which people lived. This is the sociological dimension that informs most contemporary and modern Marxist pessimists when they suggest that the industrial revolution, as a period of intense and dramatic change, represented an absolute deterioration in people's conditions of livelihood, irrespective of the presence or absence of economic gains. Because the optimistic method reduces people's qualitative or sociological life to quantitative measures, it tends to mask the multidimensional approach of the pessimists' vocabulary and historical imaginary. Such confusion has become hegemonic, and since the early

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[71] Angus Hone, 'Reply to Rawick', *International Socialism*, No. 24 (1966), pp. 27-8.
[72] Hartwell, 'The Standard of Living', p. 142.

1960s virtually all the interventions have approached the pessimists' case for deterioration in economic, rather than social, terms. The most crucial lesson we can learn from the living standard debate is that British working-class conditions are not reducible to quantitative figures alone, and that the benchmark to any theoretical claims must ultimately remain their proximity to lived history. It is this insight which underpins and guides the analysis of British food systems in the post-industrial period.

The Argument

In spite of their divergent views over the effects of the Industrial Revolution, both pessimists and optimists agree that the period 1850-1914, which is the topic of this dissertation, was characterised by substantially higher living standards, as working-class people were increasingly capable of commanding access over a greater quantity of goods. The rise of a genuine 'mass market' in consumer goods and services for the working-class, the consolidation of a national market, and the associated culture of consumerism that supported it, as well as the growing number of families who could afford vacations and mass cultural events like the music halls, cinemas and professional sports were signs of the profound social changes that accompanied higher living standards.[73] By 1911, no less than 55 percent of the English people could afford to visit the seaside on holidays.[74]

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[73] Peter Bailey, *Leisure and Class in Victorian England* (London, 1986); John Benson, *The Rise of Consumer Society in Britain, 1880-1980* (London, 1994); Andrew Davies, *Leisure, Gender and Poverty: Working-class culture in Salford and Manchester, 1900-1939* (Buckingham, 1992); William Hamish Fraser, *The Coming of the Mass Market, 1850-1914* (London, 1981); Tony Mason, *Association Football and English Society, 1863-1915* (Brighton, 1980); John K. Walton, 'Towns and Consumerism', in *The Cambridge Urban History of Britain*, Vol. 3: 1840-1950, ed. Martin Daunton (Cambridge, 2000).

[74] James Walvin, *Beside the Seaside: Social History of the Popular Seaside Holiday* (London, 1978); John K. Walton, *The English seaside resort: a social history, 1750-1914* (Leicester, 1983).

Increasingly, then, millions of working class people were capable of pulling together two fundamental aspects of the consumerist culture typical of advanced capitalist societies: time and money.

Irrespective of their theoretical traditions, scholars and historians of nineteenth century Britain have argued that a substantial and sustained rise in the conditions of life of the British working-class occurred after 1870, most importantly because of rising real wages following cheap food imports. Hobsbawm, for instance, has argued that the growth of the home market after 1870 was 'due largely to a rise in the standard of living to cheaper food import'.[75] This is also the argument put forward by Roderick Floud who highlights the close connection between falling prices of food and rising imports.[76] Similarly, Robert C. Allen has argued that the stagnation in food supplies between 1770 and 1850 was not relieved until the 1870s. 'In the last decades of the eighteenth century ... farm output stalled, and prices soared. Landlords gained at the expense of workers, and the growth in real wages was checked until international trade relieved the food bottleneck in the mid-nineteenth century.'[77] Feinstein has also demonstrated the centrality of falling food prices after 1870 on rising real wages, thus confirming, with greater details, contemporaries' understanding of the relationship between mass food imports, growing per capita food supplies, lower food prices and rising real wages.[78]

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[75] Eric J. Hobsbawm, *Industry and Empire: The Birth of the Industrial Revolution* (New York, 1999[1968]), p. 121.
[76] Roderick Floud, *The People and the British Economy 1830-1914* (Oxford, 2003), pp. 97-101.
[77] Allen, 'The Great Divergence in European Wages and Prices', p. 433.
[78] Charles H. Feinstein, 'A New Look at the Cost of Living 1870-1914', in *New Perspectives on the Late Victorian Economy*, ed. James Foreman-Peck (Cambridge, 1991), pp. 151-79.

While I entirely agree with these different authors that cheap food imports was the main factor influencing rising real wages between 1870 and 1900, I am also critical of the tendency to equate or reduce the cheapening of food with something *external* to Britain. Of course, growing imports of food during the last third of the nineteenth century was intimately linked to the constitution of an international division of labour in the provisioning of certain food items and dominated by British imperial, colonial and capitalistic power. While there is no doubt that cheap food must ultimately rest on one's ability to cheaply produce the means of life, either through capital- or labour-intensive methods or outright plunder and theft, all of them assiduously exploited under the British Empire between 1850 and 1914, too narrow a focus on the sphere of production runs the risk in conflating the potential for cheap food, as created by specific relations of production, to its realisation, and therefore to downplay the active role played by the sphere of distribution as a crucial moment mediating the space between farm and fork.

My main argument in this dissertation is that the 'production' of cheap food was very much dependent upon specific social relations of distribution *internal* to Britain, which were essential to the *realisation* of the *potential* for the mass of cheap food reaching its shores. In a capitalist society, where the vast majority of the population depends on the market to secure its reproduction, cheap food necessarily depends on a complex and comprehensive distributive system, capable of moving great quantities of food commodities quickly and effectively across time, space and scale. Food distribution must therefore be understood as part of a larger process of capital reproduction, which is premised upon the opening up of distributive activities to capital accumulation. This

entails a distributive environment geared towards efficiency and velocity through retailing infrastructures as well as organisational methods to conduct and enable food distribution on a mass scale.[79] Systems of food distribution are therefore essential to capitalist development and accumulation on the one hand, and to the emergence of a consumer society on the other. It is to a study of the evolution of these different systems and their respective impacts on the conditions of life of the British working-class through the constitution of a distributive environment geared towards cheap food that this dissertation is dedicated.

The period 1850-1914 was characterised by a general shift away from producer-retailers and towards specialised, distributive functions. In fact, the emergence of a capitalist system of food distribution was premised upon the separation of productive and distributive functions through a wider and more comprehensive division of labour. This entailed, as we shall see, the growing importance of the middleman, the distinction of market functions between retailing and wholesaling, an expanded division of labour and de-skilling and the transition towards a capital-intensive retail environment. To be sure, not all of these aspects were fully developed by 1914. The evolution of the distribution system in Britain was anything but smooth: piecemeal in nature and regionally uneven, transformation in the distributive system entailed a dramatic reorganisation of the space

[79] James B. Jefferys, *Retail trading in Britain 1850-1950: A study of trends in retailing with special reference to the development of Co-operative, multiple shop and department store methods of trading* (Cambridge, 1954); Janet Blackman, 'The Food Supply of an Industrial Town', *Business History*, Vol. 5, No. 2 (1963), pp. 83-97; Peter Mathias, *Retailing Revolution* (London, 1967); David G. Alexander, *Retailing in England during the Industrial Revolution* (London, 1970); Gareth Shaw, 'Changes in consumer demand and food supply in nineteenth-century British cities', *Journal of Historical Geography*, Vol. 11, No. 3 (1985), p. 295; James Schmiechen and Kenneth Carls, *The British Market Hall: A Social and Architectural History* (New Haven and London, 1999).

and interface between consumers and producers. But while food distribution remained firmly based on labour-intensive methods of distribution, the trend towards a more capital-intensive retail environment was clearly visible and accelerating, thus creating an environment characterised by the presence of retailers operating at different scales and commanding vastly different means. The changing interface in the food distribution system must therefore be seen through the dialectics between capital's search for distributive infrastructures geared towards the acceleration of distribution time on the one hand, and the complex social reality animating competing retail interests through labour-intensive methods.

Economic historians have rightly stressed the importance of cheap food imports for rising real wages and working-class improvement. Yet their emphasis on real incomes and prices has tended to exclude from the analysis a critical investigation of the conditions of possibility of cheap food in the context of rapid social and economic change and development. The theoretical upshot of an explanation of rising real wages as the result of imported food is the reduction of the food distribution system to the status of a static 'container' through which food commodities are channelled. In this respect, it is the purpose of this dissertation to demonstrate that distribution is a constitutive 'moment' of the political economy of food and plays an active role in the realisation (or not) of low food prices. On the other hand, there exists a vast literature on retailing infrastructures, and historians and scholars in this tradition have produced important contributions on the different aspects of the ways in which people obtained their food and drink. Even though this literature is characterised by a natural inclination to see the distribution system as

inherently dynamic and changing, it has been less attentive to the impacts of such dynamism on the conditions of life of the working-class, notably in the constitution of a retail environment centred on cheap food. A primary purpose of this dissertation is to bring together these different literatures in order to shed new light onto the relationship between food distribution and standards of living.

I make two fundamental claims in relation to my main argument. The first one is that food is not reducible to quantitative measures alone. As Marx reminds us, an important aspect of capitalist social relations is the tendency to reify our relation to the world through the fetishism of the commodity form. While there is no doubt that sufficient intake of food is an important element to any serious assessment of working-class living standards, the quality and variety of food associated with any given diet clearly matters and cannot be taken for granted. Something fundamental is lost when the sensuousness and qualitative properties of food as use-value are abstracted from the study of the working class's diet, and reduced to mere exchange-values, themselves expressed in money. This is especially true in Britain given the troubling level of adulteration of food and drink reached during the nineteenth century. For this large-scale fraud on the pocket diminished the actual purchasing power of the working-class, thus reaffirming the importance of a healthy suspicion towards one-dimensional approach to living standards exclusively through the prism of real wage, but also tended to lower the nutritional value of diets. Moreover, the practice was often injurious to health, even leading to death in some cases. In the context of widespread poverty and undernourishment, however, any

practice seeking to purposefully cheat customers for economic gains were necessarily felt even more severely.

In this regard, one of the most striking and perplexing aspects of the living standard debate has been the general absence of any discussion on the changing quality and nutritional properties of food during the time period in question. Against Hobsbawm's very brief reference to the findings of *The Lancet*'s inquiry in the 1850s and the then terrible proportion reached by food adulteration, Hartwell put forward the very poor argument that the phenomenon was nothing new given that Tobias George Smollett had already reported its existence in 1771. Of course, the intended effect of Hartwell's argument was to demonstrate that food adulteration could be traced back *before* the Industrial Revolution in order to shield the 'optimistic' view from the association between industrialisation and food adulteration. In his short, yet incisive reply, Hobsbawm, building on John Burnett's seminal work, did not fail to point out that the question had nothing to do with adulteration as a peculiar product of industrialisation or not, and everything to do with determining the extent to which the practice increased during this period. As it happens, food adulteration grew substantially over a period of about 80 years (*c.*1790-1870), most probably peaking in the 1860s, before subsequently declining rapidly. The fact that Hartwell did not mention it at all in his subsequent reply is an implicit admission of what could no longer be denied.[80]

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[80] Hobsbawm, 'The British Standard of Living', p. 60; Hartwell, 'The Rising Standard of Living in England', pp. 414-5; Hobsbawm, 'The Standard of Living during the Industrial Revolution', p. 127; John Burnett, *Plenty & Want: A social history of diet in England from 1815 to the present day* (London, 1979[1966]), pp. 99-120, 240-67; Hartwell, 'The Standard of Living'. More recently, Feinstein's case for a more pessimistic picture of the living standard during the Industrial Revolution has acknowledged food

In spite of these rare glimpses into the quality of food, both pessimists and optimists have largely remained silent about the problem of food adulteration, most likely because of the difficulty of incorporating changing quality into statistical calculations. Now, it is surely quite significant that virtually no optimists after Hartwell have engaged with the question of food adulteration. This is obviously not surprising because food adulteration is closely linked to poverty (i.e. the lack of purchasing power), deficiencies in the food supply and heightened retail competition, all of which sit rather uneasily with the optimistic view. Given its importance, it is equally troubling that pessimists have so far largely failed to engage with the magnitude of the problem. There is indeed a strong tendency within British economic history to reify food as purely quantitative in nature, and therefore safely amenable to statistical representation. The tendency to take food for granted as an unchanging 'thing' is one crucial aspect that economic history accounts of the period 1850-1914 shares with the living standard debate. Any serious engagement with the conditions of life of the working-class must therefore be attentive to the question of adulteration, as I demonstrate in Chapter 2 of this thesis.

The second claim is the notion of distribution must be seen through two analytically distinct, yet dialectically related, definitions of it. First, the *physical* or material distribution refers to the distributive infrastructures, which, together, form the distributive system as a system capable of moving certain quantities of food over time and space. From this perspective, the physical environment of distribution of food is associated with specific technologies and social and organisational structures around

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adulteration as an important factor in further mitigating any real improvements. See also: Feinstein, 'Pessimism Perpetuated', p. 649.

which food retailing is conducted, thus informing a certain division of space and labour amongst retailers in the provisioning of food and drink to the working-class. This is the analytical definition that has informed much of the literature on retailing and its emphasis on the changing patterns of development associated with food provisioning in the context of rapidly expanding urban and sub-urban environments. The second concept of distribution relates to the *social* distribution of food within society. At this level of analysis, the uneven distribution of food must be understood as socially mediated through class, gender, race and age relations. In this respect, while real wage figures speak to the dynamics associated with the distribution of economic power amongst different social classes, it tells us very little about the ways in which this specific distribution of wealth is itself unevenly distributed amongst the different members of the family. This is a particularly important point which has largely been ignored by the living standard debate, a tendency which has also permeated accounts of working-class living standards after 1850. In relation to the first claim mentioned above, then, both definitions of distribution shape, and are shaped, by the quantitative and qualitative properties of food, as I demonstrate in Chapter 1 of the dissertation.

Methodology

This project will employ a multi-layered quantitative and qualitative approach, using policy and textual analysis to study the role of cheaper food in labour market restructuring. The primary data analysed and collected through the project are the following: (1) *British Parliamentary Papers* — tens of thousands of pages from reports,

the census, minutes of evidence, laws, data and statistics published by the British government; (2) *Contemporary journals* — publications, data, reports and policy analysis from officially recognised professional organisations that document, analyse and comment on different social and economic aspects of British society; (3) *Newspapers* — news, reports and opinions on British society; and (4) *Civil Society materials* — public policy analysis, reports, statistics and social and economic interventions, including books, tracts and pamphlets. Though I have greatly benefitted from the analysis of modern historians and scholars, this dissertation gives an important analytical and interpretative role to contemporary scholarship. Careful triangulation between secondary and tertiary sources through people's voices, which lend new insights into working class daily life, have been privileged where possible.

It is usually convenient to divide documentary materials according to timescale categorisation between primary, secondary and tertiary sources. In this dissertation I have adopted the following general classification:

> 'primary sources' consist only of evidence that was actually part of or produced by the event in question; 'secondary sources' consist of other evidence relating to and produced soon after the event; and 'tertiary sources' of material written afterward to reconstruct the event.[81]

[81] Peter Burnham, Karin Gilland, Wyn Grant and Zig Layton-Henry, *Research Methods in Politics* (New York, 2004), p. 165.

According to this classification, then, the following dissertation does not contain any primary sources. This is appropriate for at least two reasons. First, virtually all of the historical materials used here consist of reports, data, statistics and other contemporary reconstructions by people who lived during the period under review, and therefore constitute secondary sources. The second reason is simply that while this dissertation is a historically informed argument about the role of food and its distribution in rising real wages, it is *not* the work of a professional historian. Nor does it intend to be.

Although in-depth archival works obviously constitute an important avenue for further research, in this dissertation I have privileged Parliamentary Papers because they highlight wider national trends. Most annual reports in the Blue Books are written with local reports and realities in mind, although they do not constitute, of course, a substitute for more fine-grained analysis of local variations and specificities. I have therefore, when possible, relied on historically well-informed contemporary writings about specific towns or regions and tertiary sources. These different methodological choices are consonant with my objective of looking at the question of food distribution and living standards from a more general perspective.

A systemic and comprehensive history of the close relationship between food consumption and distribution in the context of an emerging international food regime remains to be done. This dissertation is a first step in this direction. My main concern here is to provide a coherent framework and illuminating account of the centrality of food and its distribution for the British working-class between 1850 and 1914, and to show the extent to which the 'production' of cheap food rested on the constitution of a distributive

environment geared towards the mass circulation of food commodities in space. Consequently, a detailed exposé and analysis of the relations of food production both at home and abroad lies outside the scope of this dissertation.

Chapter Outline

The present dissertation is divided in two sections. The first section, which establishes, through two chapters, the basis upon which the dissertation is built, is concerned with the vital relationship between food and standards of living. It puts into practice the lesson learned from the living standard debate and the long held proposition advanced by critical and Marxist historians that real wages reveal as much as they conceal about the ways in which the different segments of the working-class actually lived their lives. In this respect, the purpose of the first section is to hold in dialectical tension an approach to food as both quantitative and qualitative in order to get a more precise picture of its active mediating role over the conditions of material life. Any attempt at understanding the British working-class's living standards between 1850 and 1914 must be sensitive not only to the resilience of chronic poverty, destitution and malnourishment, but also to the ways in which such changes were embodied in socially differentiated ways through specific food relations. Thus, while my main concern in this first section is the constitutive role of food over conditions of life, I should make clear at the outset that questions pertaining to well-being and social and material improvements are not reducible to food alone. Rising standards of living after 1870 were positively influenced by major improvements in sanitation, water supply, working conditions, urban

planning, political participation and combination. While I recognise their importance, the focus here is on food.

Chapter 1 looks at food in *quantitative* terms and stresses its importance in the constitution of wages and the value of labour-power. It is interested in delineating the relationship between the cheapening of food on the one hand, and general trends over food consumption, living standards and people's health. While I uphold the general view that cheap food imports after 1870 contributed to a large extent to rising real wages, my main concern here is to define larger societal trends in regards to food relations and their mediating role in peoples' daily lives. Contrary to economic historian James Foreman-Peck who has argued that since 'well-being cannot be observed, the obvious measure has been changes in the goods and services that can be consumed',[82] one of the main arguments of this chapter is that well-being was very much visible to anyone who dared to look at those underfed, pale, weak and thin bodies. The idea that improvement (or not) is socially embodied in historically specific ways is therefore a central claim of this first chapter.

Chapter 2 looks at food in *qualitative* terms. It tackles the issue of food quality, including the widespread phenomenon of the adulteration of food and drink, and argues that there is a need to understand the quality of food as dynamic and socially mediated. My main argument in this chapter is to demonstrate that by taking the qualitative properties of food for granted, quantitative approaches to food and living standards have tended *both* to underestimate *and* overestimate what they pretend to describe. The

[82] James Foreman-Peck, *New perspectives on the late Victorian economy* (Cambridge, 1991), p. 147.

gradual decline of food adulteration after 1870 marked an important diminution of a widespread societal fraud, the recovery of the full nutritional value of food and drink, and the decline in health-related problems associated with low-quality food. On the other hand, changing food properties in the context of gendered social relations and the uneven distribution of food amongst the members of the household could also lead, as it did, to lower nutritional achievements for women and children, especially in poor families. Poverty-stricken diets based on margarine, bread made of refined flour and skimmed milk were more detrimental to poor women and children in the long run. The quantity of food consumed is not the whole story, and an approach sensitive to the changing qualitative properties of food in the context of uneven distribution and embodiment along classed and gendered lines illuminates a still deeper analysis of social change.

Beyond the price form, then, Chapter 2 offers a deeper social history of food as use-value. The purpose here is to throw some light on the inherent fetishism contained in more quantitative approaches to food consumption as mere exchange-values, and therefore to complicate both ideas of progress and improvement highlighted in the previous chapter. A pint of beer, a cup of tea or a loaf of bread were never simply a pint of beer, a cup of tea or a loaf of bread, and their changing nutritional qualities between 1850 and 1914 had dramatic effects on people's health and well-being, effects that are rarely if ever factored into the assessment of the conditions of life of the working-class during this period. Chapter 2 thus challenges the usual interpretation of improvements and rising standards of living through a more nuanced social history of changing food quality and its uneven distribution within the social fabric. The importance of these

transformations suggests that those who experienced rising real wages were also increasingly able to obtain the full benefits of what they paid for, and therefore were accessing the whole nutritional and economic value of purchased food. At the same time, changing food properties and the introduction of new products of lower nutritional value such as margarine and skimmed milk could be, and in many cases were, detrimental to the poorest segments of the working-class.

Building on this, Section 2 highlights the importance of looking at domestic arrangements of distribution as an essential element to cheap food and the role that they played in the realisation of higher standards of living. While the capacity to offer low prices was increasingly dependent upon the constitution of a capital-intensive environment based on the mass transportation and distribution of food, especially after 1880, one of the main purposes of this section is to demonstrate the resilience of labour-intensive methods of distribution throughout the period under review. In fact, such methods and practices of self-exploitation by small-scale retailers remained the principal form of distribution by 1914. As such, it constitutes an important strategy of reproduction in order to survive in the context of cut-throat competition that cannot be discounted as less rational than forms of capital accumulation based on the reinvestment of capital into larger and more efficient retail facilities. In short, the 'production' of cheap food was not only dependent upon the increased capitalisation of the space between farm and fork, but also upon the heightened self-exploitation of street sellers, shopkeepers and other small-scale retailers whose presence remained central to food retailing. In this respect, cheap food and rising standards of living for most of the working-class relied actively on the

maintenance of small retailers into insecurity and precariousness.

Chapter 3 looks at the social dynamics underpinning the historical transformation of the distribution system. It argues that the constitution of the bourgeois urban hegemony is rooted in its capacity to gain political and economic control over the town's food and secure sufficient supply in order to impose its spatial order over the flow of food commodities. I trace back the origin of these changes over the control and organisation of the urban environment in the evolution of the traditional marketplace and its rearticulation towards capitalist motives. The provisioning of sufficient market accommodations was key to the cheapening of food and the ability of local authorities to link the provisioning of the marketplace with technologies of mass food circulation such as the railway became vital to the town's supply with the cheapest and most varied food commodities. The transformation of the market*place* into a rationally organised site geared towards the more efficient movement of food commodities in the distributive space was central to the rearticulation of food distribution in the context of growing urbanisation and the demands of a working-class increasingly dependent upon the market for survival. The ultimate evolutionary form of this transformation was the gradual alteration, particularly salient in larger towns where the pressure of suburbanisation was the greatest, in the social function of the marketplace from retailing to wholesaling.

Chapter 4 analyses the role of costermongers, hawkers and other street sellers in providing the working-class with cheap food, the possibility of which I trace back to their chronic marginalisation and precariousness. The ability of this class of retailers to sell cheaply the means of life and therefore to transfer the full benefits of cheap food directly

to the working-class was very much rooted in their own poverty and destitution. In this respect, I argue that street sellers were *walking contradictions* within the bourgeois distributive order as they represented the most extreme exploitative form of capital's need to subject the distributive sphere to the dictates of accumulation. Their growing presence in the streets of Britain continuously undermined the idea of linear progress, and their portrayal by the elite as a threat to the social order in order to exclude and dissociate them from capitalism remained a thin ideological veneer against the strong solvent of their vital role to its functioning. Their economic importance was therefore linked to their economic hardship, and, accordingly, rising working-class living standards was in part premised upon locking a whole segment of it into chronic poverty. This contradiction, as we shall see, was secured through the policing of these populations. Moreover, gendered, racialised and generational social relations mediated the maintenance of this class into chronic poverty, thus reproducing highly hierarchical and exploitative strategies of reproduction within the costermongering class itself.

Chapter 5 investigates the historical development of the shopkeeper under cutthroat competition in the retail sector and the ways in which most of them came to weather the economic storm of low food prices through the introduction and increased reliance on labour-intensive methods, including extended retail hours, the systematic overworking of shop's assistants, unpaid family labour and the employment of youth, women and immigrants to lower the cost of labour. For these proud members of the lower- and middle-class orders of society, then, the maintenance of their social status increasingly came to depend upon heightened self-exploitation. Shopkeepers were often

powerful members of their respective boroughs, and sometimes used their influence to push local policies that would shield them from the worst effects of competition. In spite of their number, however, shopkeepers' living standards were receding and the abstractness of the ideals of autonomy and economic security were increasingly bought at the price of its practical inexistence.

Chapter 6 interrogates the growing importance of large-scale retailers. Problematising the meteoric rise of both the co-operative movement and multiple shops, I argue that the capacity of these large-scale retailers to offer their respective clientele the benefits of relatively cheap food was based on capital-intensive strategies of growth and development through which economies of scale could be realised, notably by taking advantage of technologies of mass circulation like the steamboat and the railway. One important feature of these large-scale retailers was their active development towards vertical integration, which allowed for further economies of scale by the cutting out of the middlemen. The increased capitalisation of the distributive chain was nowhere better illustrated than in the mushrooming of small retail empires such as Lipton or Home & Colonial. More importantly, however, this chapter argues that the rise of large-scale retailers is indicative of the vital role that the distribution system came to play in the politics of consumption within the context of capital accumulation. Although the politics of consumption that informed the respective strategies of the co-operative movement and multiple shops revolved on entirely different normative assumptions regarding the role of consumption in society, both expanded through capital-intensive methods of growth

based on the systematic reinvestment of capital into more efficient and better integrated retail structures and strategies.

Finally, Chapter 7 looks at the role and development of the railway in the establishment of structures of circulation essential to the massive flow of goods and capital. Building on David Harvey's work, this chapter argues that the railway contributed to the acceleration of circulation time of food commodities through the establishment of new space-time relations, thus contributing to the compression of space by time. Again, the 'production' of cheap food was dependent upon the system's ability to move immense quantities of food goods over space and within shorter periods of time. Of course, this had enormous implications not only for the supply and price of food, but also to its overall quality. Perishable food commodities such as milk, dead meat, fruits and vegetables from distant places were suddenly made available to mushrooming urban centres. 'Every limit appears as a barrier to be overcome' famously said Marx in his *Grundrisse*. The railway dramatically transformed the food supply precisely because it overcame what used to be regarded as an *absolute* limit – that is the distance that food commodities could span without deteriorating – into a *relative* barrier. On the other hand, the railway, like any other technology, remains a *social* technology whose development cannot be taken for granted. In this respect, the chapter aims to demonstrate the importance of the political and legal context within which it evolved, notably because regulations throughout the period under review depended on a strong commitment to free trade policies. The constitution of a national system of railways laid the foundation for the rapid movement of food goods across space, and thereby contributed to the fracturing

of previous geographies of production. In short, it was the backbone that supported the mass consumption of food for a population almost wholly dependent on the market to obtain its means of reproduction, reshaping from the bottom up people's relation to food. With the railway, the capitalist separation between people and their means of subsistence reached an entirely new scale.

Part I: Living Standards, Food and the Body

1. Cheap Food and the Rise in Living Standards

> In nothing was the contrast between wealth and poverty more obvious than in food. House, dress, or manner might still be a misleading test of income in 1850, but a man's dinner-table instantly announced his standard of living to the world at large.[1]

Historians and scholars have long recognised the central importance of declining food prices during the last quarter of the nineteenth century for rising real wages. The purpose of this chapter is to offer a general introduction to the problem of the working class's living standards through the prism of food. More specifically, my argument is that food shapes, and is shaped, by social relations in historically specific ways. One of the key outcomes of this dialectical relation is that food is embodied in complex ways according to fundamental relations of lived reality such as class, gender and generation.

In this chapter I maintain two different yet complementary conceptions of distribution. The first conception, which I explore in the first two sections, looks at the distribution of wealth at the level of the social whole. In the first section I look at the role of food in the constitution of a healthier, more prosperous working class. Finding very little support for rising living standards before the 1870s, I argue that the shift towards social betterment only came with the mass imports of cheap food, the lower price of which had a definite impact on the majority of the working class. I qualify this assertion in the second section by looking at the resilience of poverty and destitution amidst plenty, arguing that for an important minority of labourers living standards remained at best the

[1] Burnett, *Plenty & Want*, p. 98.

same. Industrial capitalism was indeed actively engaged in the mass production of underfed, poorly clothed and poorly housed individuals.

In the third section I explore my second claim, namely, that food was unevenly distributed amongst the members of the household. Here I argue that both women and children often embodied a different history of hardship and poverty, mediating as they were the contradictory demands between the formal economy and the requirements of the household economy. Finally, I look at how food and its uneven distribution from both conceptions were physically embodied across the social fabric. As I demonstrate, the mass production of rachitic, feeble, thin, and anaemic bodies only started to recede in the 1880s as a result of the better nourishment which started in the previous decade.

Changing Diets

Based on the different household budgets of working class families, some have concluded that, at the dawn of the twentieth-century, widespread malnutrition and chronic undernourishment remained a reality for the majority.[2] While there is no doubt that hunger and starvation still existed in the early 1910s and that people living in chronic poverty constituted an important part of the population, there is also a risk involved in elevating these sociological surveys to the status of objective truth on dietary realities, and to reading their content as capable of definitive knowledge amenable to quantitative

[2] Jack C. Drummond and Anne Wilbraham, *The Englishman's Food: Five Centuries of English Diet* (London, 1991[1939]), p. 403; Derek J. Oddy, 'Working-Class Diets in Late Nineteenth-Century Britain', *The Economic History Review*, Vol. 23, No. 2 (1970), pp. 314-23; Derek J. Oddy, 'The Health of the people', in *Population and Society in Britain 1850-1980*, ed. Theo Barker and Michael Drake (London, 1982), pp. 121-9; Derek J. Oddy, *From Plain Fare to Fusion Food: British Diet from the 1890s to the 1990s* (Woodbridge, 2003).

conclusions. The danger lies in all that is excluded. For one, household budgets rarely 'record[ed] consumption of alcoholic beverages and sweets, foods purchased and eaten away from home, foods eaten by visitors, nor the amount of food wasted.'[3] Indeed, temperance propaganda and reformist attitudes did not invite confidence over drink expenditures. Working class families which meticulously kept track of their spending were rare, and the vast majority of these surveys were based on oral interrogations and therefore approximations. Too literal an interpretation would indeed make it difficult to explain the growth in food consumption, the revolution in food retailing, manufacturing and advertising, the increasing quality and variety of food available as a result of a greater, better, and more regular supply, as well as the commodification of everyday life, as evidenced by the growth of the service industry.

Moreover, one should not underestimate the conflicting class cultures that existed between social reformers and working class people. Such was the root of 'the disorder that had been common when the mothercraft movement began its systematic visiting in 1905, with neighbours jeering the visitor as she approached the door of a house containing a new infant and shouting 'bribery' if the mother let the lady in.'[4] Suspicion existed on a large scale, and the case of Mrs B who could 'stand very little advice or argument' was probably common.[5] In this context, it is highly probable that household budgets were filled out with

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[3] Michael Nelson, 'Social-class trends in British diet, 1860-1980', in *Food, Diet and Economic Change Past and Present*, ed. Catherine Geissler and Derek J. Oddy (London, 1993), p. 101. See also: Anthony E. Dingle, 'Drink and Working-Class Living Standards in Britain, 1870-1914', in *The Making of the Modern British Diet*, ed. Derek Oddy and Derek Miller (London, 1976), p. 122.
[4] Francis Barrymore Smith, *The People's Health 1830-1910* (New York, 1979), p. 117.
[5] Maud Pember Reeves, *Round About a Pound a Week* (London, 1914), p. 168.

> selective omission of foods and practices that were likely to generate disapproval, especially alcohol of all kinds (after all, beer does have food value), and tasty treats cooked outside the home, such as fish and chips. The absences from the early dietary surveys, taken at face value, would make it very hard to understand the strength of the brewing interest, or the meteoric rise of the fish and chip shop, or the enormous numbers of greengrocers' and confectioners' shops in the industrial towns.[6]

The general absence of fish from these surveys is curious, if not suspect. 'The rooms of the very neediest of our needy metropolitan population,' wrote Henry Mayhew in 1851, 'always smell of fish; most frequently of herrings.'[7] By 1877 J. Thomson and Adolphe Smith said 'that but for our cheap fish supply the poor of London would undoubtedly be reduced to the most acute stages of starvation.'[8] Arguably the more or less regular intake of fish around the middle of the nineteenth century must have been restricted to coastal towns and large cities with more elaborate systems of transportation, but subsequent improvements in the means of transportation and trawling technologies, the rise of the fish and chip shop, and the importance of costermongers for fish markets, especially

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[6] John K. Walton, 'Book Review', *From Plain Fare to Fusion Food: British Diet from the 1890s to the 1990s*', Institute of Historical Research on-line reviews, No. 350, http://www.history.ac.uk/reviews/review/350.
[7] Henry Mayhew, *London Labour and the London Poor*, Vol. 1 (London, 1861[1851]), p. 62.
[8] John Thomson and Adolphe Smith, *Street Life in London* (London, 1877), p. 58.

Billingsgate, suggests the need for a more careful approach to these different social surveys, as valuable as they are.[9]

There is little doubt that in 1850 the diet of working-class families was starchy and monotonous in the extreme, made up almost entirely of bread, potatoes, butter, and bacon. Overall, diets were short on vitamins A, C and D, deficient in protein, fat and energy, and low in calcium, but high in carbohydrates and dietary fibre.[10] The repeal of the Corn Laws in 1846 had had no direct effects on the prices of wheat, and though greater quantities of it reached the ports of Great Britain, supply continued to run behind demand. Transportation technologies which would permit the vast movement of food commodities across oceans and continents were still in their infancy, though sustained capital investment in the built environment (e.g. roads, railways, canals, ports, steamships) both at home and abroad were preparing the ground for the upcoming colonial plunder. The benefits of Free Trade policies and the imperial and colonial capacity to invite the world to the working class table only became a reality with the establishment of resilient and comprehensive infrastructures of transportation and whose primary function rested in the lowering of the circulation time of capital.

The third quarter of the nineteenth century also witnessed the emergence of the Second Industrial Revolution and the development of more intensive forms of capitalist production and labour management founded on labour productivity and technological

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[9] W. H. Chaloner, 'Trends in Fish Consumption', in *Our Changing Fare: Two Hundred Years of British Food Habits*, ed. T.C. Barker, J.C. McKenzie and J. Yudkin (London, 1966), pp. 94-114; John K. Walton, *Fish and Chips and the British Working Class* (Leicester, 1992).

[10] Drummond and Wilbraham, *The Englishman's Food*, pp. 329-35; Nelson, 'Social-class trends in British diet', pp. 102-4; Derek J. Oddy, 'Food, drink and nutrition', in *The Cambridge Social History of Britain 1750-1950*, Vol. 2, ed. Francis M. L. Thompson (Cambridge, 1990), pp. 267-73.

progress. One important aspect of these shifts was the profound transformation in and restructuring of working class occupations. Representing about 80 percent of the population, the working class was hardly homogeneous, segmented as it was by incomes, social status and culture. Representing 10 to 15 percent, skilled craftsmen earned up to 50*s.* per week, while semi-skilled workers, typically machine operators, earned between 25*s.* and 35*s.* per week.[11] The unskilled, composed of the general labourers, navvies, domestic servants and agricultural labourers, earned less than 25*s.* per week. Finally, there also existed what Charles Booth called 'the submerged tenth', that is, the unemployables, tramps and destitute of the British society.[12]

The second group of semi-skilled workers was the largest single group at that time, and its significance rested in the proportion of industrial workers engaged in better-paid jobs. Between 1881 and 1911, mining and quarrying grew from 4.6 percent to 7.2 percent of total wage-earners, while employment in transport (e.g. railways, road, ships, canals, docks, messengers) increased from 7.6 percent to 10.1 percent. Profound mutations were developing in the manufacturing sector as well, which comprised about one-third of wage-earners. Sectors like engineering, shipbuilding, pig iron, and manufactured iron and steel grew from about one-fourth to one-third of those employed in manufacturing, while those employed in textiles saw the exact opposite happen. While the ranks of those new sectors associated with the second industrial revolution doubled,

[11] On British money, weights and measures, see: Appendix A.
[12] James P. Johnston, *A Hundred Years Eating: Food, Drink and the Daily Diet in Britain since the late Nineteenth Century* (Montréal, 1977), p. 2.

the number of workers employed in the old industries of textiles, clothing and footwear remained roughly the same.[13]

Yet while nominal wages in these more prosperous sectors had risen during the 1860s and early 1870s, these advances had failed to materialise into real gains. As urbanisation and population growth kept undermining gains in nominal wages, the cattle plague of 1865 further pressured an already inadequate food system, forcing up the prices of meat and milk. When prices started to fall in 1873 following massive imports of cheap food, those who benefitted the most were precisely the skilled craftsmen, semi-skilled operators, and those situated at the higher end of the unskilled occupations who were now experiencing the benefits of rising real wages. Workers earning between 21*s.* and 30*s.* per week, which Booth qualified as representing the 'way we live now', experienced the security and comfort of better nourishment. 'Meals are more regular. For dinner, meat and vegetables are demanded every day. Bacon, eggs and fish find their place at other times. Puddings and tarts are not uncommon, and bread ceases to be the staff of life. ... In this class no one goes short of food.'[14] For a hungry nation, the first outcome of rising real wages was always the increased consumption of food.

Robert Giffen calculated that between January 1873 and January 1879 the overall index of prices fell by 24 percent, wheat fell by up to 35 percent, flour by up to 51 percent, beef of inferior quality by 26 percent, and sugar by 26 percent.[15] The reduction

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[13] Charles Feinstein, 'New Estimates of Average Earnings in the United Kingdom, 1880-1913', *The Economic History Review*, Vol. 43, No. 4 (1990), pp. 603-4.
[14] Charles Booth, cited in Derek J. Oddy, 'Working-Class Diets in Late Nineteenth-Century Britain', p. 321.
[15] Robert Giffen, 'On the Fall of Prices of Commodities in Recent Years', *Journal of the Statistical Society of London*, Vol. 42, No. 1 (1879), pp. 38-9.

of the food bill would eventually reach 30 percent during the following years.[16] It is hard to overestimate the importance of these changes on a population spending between half and two-thirds of its total income on food. Charles Feinstein has demonstrated the vital role and importance of food in the overall decline of the cost of living between 1870 and 1914, in spite of rising rent.[17] The price of drink and tobacco remained stable throughout the period, the former rising as a result of a sharp increase in duty on spirits in 1910. As Ellen Ross explains, it was generally 'in periods of rising money wages (as opposed to real wages) that the peaks in spending on drink were manifested, as men took their extra earnings directly to the pubs.'[18] This was particularly true for the 1850s and 1860s, and it is no coincidence that the consumption of beer peaked at 34 gallons per person per year in 1876, when real wages were rapidly increasing as a result of cheap foodstuffs. Arguably the very possibility of 'prosperity' triggered a more temperate attitude in order to push further these new standards of living.

Perhaps one of the main indicators that growing segments of the working class were on the road to prosperity was the shrinking proportion of the food budget spent on bread. Bread, which took one-third of total expenditure on food in 1841, represented one sixth in 1881, and continued to decline after that. The average price of the 4 pound loaf of bread in London dropped from 10.75*d.* in 1855 to 8*d.* in 1870 to 5.08*d.* in 1895.[19] 'The important point', argues Burnett, 'is that while bread consumption had continued to rise to an estimated average of 270 lbs per year, it had, because of reduced cost, already

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[16] Burnett, *Plenty & Want*, p. 132; Johnston, *A Hundred Years Eating*, p. 9.
[17] Feinstein, 'A new look at the cost of living 1870-1914', p. 170.
[18] Ellen Ross, *Love and Toil: Motherhood in Outcast London, 1870-1918* (Oxford, 1993), p. 43.
[19] Brian R. Mitchell, *British Historical Statistics* (Cambridge, 1990[1988]), p. 770.

ceased to be the article of primary food expenditure'.[20] The increased consumption of bread and its declining share of the food budget tended to create new consumption capacities for 'luxuries' such as cheese, butter, milk and fish, thus marking the beginning of a process through which the luxuries of the previous generation became the food staples of the present one. For more and more people, then, bread had stopped to be the meal itself.

With the price of bread declining, meat rapidly came to replace the former as the main food expenditure. Sparked by the cattle plague of 1865, tinned meat from Australia soon reached the shores of England. Cheaper than butcher's meat, many still looked at it with suspicion, except, perhaps, the very poor who could not afford to be disdainful.[21] With the development of the means of transportation and technologies of preservation, more meat at a better price became available to the working hands. Livestock and chilled beef imports from North America grew significantly from 1875 onwards, and from the early 1880s, with the development of refrigeration, imports of frozen beef and mutton from Argentina, Australia and New Zealand rose sharply, pushing prices further down. Although bacon remained an important source of protein, meat was becoming accessible to all but the lowest-paid working classes. Even prime English beef and mutton fell respectively by 31 percent and 27 percent between 1873 and 1893.[22] One can appreciate further the importance of the fall in the price of meat through the parallel decline in

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[20] John Burnett, 'Trends in Bread Consumption', in *Our Changing Fare: Two Hundred Years of British Food Habits*, in Theodore C. Barker, John C. McKenzie and John Yudkin (London, 1966), pp. 73, 72. See also: Johnston, *A Hundred Years Eating*, p. 23.

[21] Robert Roberts, *The Classic Slum: Salford Life in the First Quarter of the Century* (London, 1990[1971]), p. 108.

[22] Betty McNamee, 'Trends in Meat Consumption', in *Our Changing Fare: Two Hundred Years of British Food Habits*, ed. T.C. Barker, J.C. McKenzie and J. Yudkin (London, 1966), p. 83.

poaching and game. In 1851 Henry Mayhew estimated that, among others, 145,000 partridges, 107,000 snipes, 46,000 plovers, 313,000 larks, 33,000 widgeons, 102,000 hares, 860,000 rabbits, and 1,002,000 geese were sold annually in the streets of London.[23] Mayhew's findings 'implied that large-scale poaching was not merely a means of assuaging the hunger pangs of the rural poor but was organized on a commercial basis for the urban market'.[24] Yet, like many other illicit practices such as adulteration, the mass arrival of cheap food on the market had the effect of seriously undermining the economic and social basis of poaching without, however, eradicating them.[25]

Average per capita consumption of meat per annum in the United Kingdom remained relatively stable between 1831 and 1870. From 86.8 lbs in the 1830s it dropped to 82.5 lbs in the 1840s, before resuming its course at 87.3 lbs and 90.0 lbs in the following two decades. It was not until the 1870s that the consumption level would finally depart from previous trends and reach about 110 lbs. Peaking at 132 lbs during the first half of the 1900s, meat consumption slightly declined to about 127 lbs during the decade preceding World War I.[26] Of course, discrepancies arise when we look at these figures from a class perspective. For instance, by 1903 artisans, mechanics and labourers ate on average 107 lbs of meat per annum, compared with 122 lbs for the lower middle class, 182 lbs for the middle-class and 300 lbs for the upper middle class and upper

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[23] Mayhew, *London Labour*, p. 122.
[24] McNamee, 'Trends in Meat Consumption', p. 77.
[25] Harvey Osborne and Michael Winstanley, 'Rural and Urban Poaching in Victorian England', *Rural History*, Vol. 17, No. 2 (2006), pp. 204-7.
[26] Richard Perren, *The Meat Trade in Britain 1840-1914* (London, 1978), p. 3.

class.[27] Similar trends are discernible for other food commodities as well, the upper class consuming on average three to four times as much milk than urban workmen, and almost three times more butter.[28] Yet while this gives us a better understanding of the ways in which food was distributed amongst classes, it still leaves us in the dark about the uneven distribution of meat and other food commodities amongst the members of the household, an aspect to which we will come back later.

This is very much in line with the view that living standards did not improve before the 1870s. Contemporaries were not oblivious to the problem facing an increasingly shaky meat supply. In a paper read before the Society of Arts in 1868, Wentworth Lascelles Scott tackled the 'great food-question', stating that Britain was 'now at the eleventh hour attempting to remedy' the evils of ongoing deficient meat-supply. National production was not only chronically insufficient, but increasingly so. Estimating the shortage of meat in the metropolis to over 46,000 tons, Scott remarked that 'it is not too much to say that the entire country is in a state of mitigated starvation.' Indeed, London market prices for beef and mutton had increased by 33.3 percent and 36.3 percent respectively between 1850-51 and 1866-67, thus suggesting a lagging supply.[29] As we shall see in the next chapter, the argument that living standards did not

[27] W. H. Barfoot-Saunt et al., 'Production and Consumption of Meat and Milk, Second Report from the Committee Appointed to Inquire into the Statistics Available as a Basis for Estimating the Production and Consumption of Meat and Milk in the United Kingdom', *Journal of the Royal Statistical Society*, Vol. 67, No. 3 (1904), pp. 382.

[28] W. H. Barfoot-Saunt et al., 'Production and Consumption of Meat and Milk, Third Report', *Journal of the Royal Statistical Society*, Vol. 67, No. (1904), pp. 391-2.

[29] Scott, 'On the Supply of Animal Food to Britain', pp. 256-7. See also: Perren, *The Meat Trade in Britain*, p. 67.

rise for the majority of the working classes becomes unmistakable when one considers the quality of food during those years, especially meat.

The high prices of milk, cheese, and meat in the 1860s made it 'a matter of certainty that only in homoeopathic doses can any of these luxuries reach the stomach of the father or mother of a family of the labouring class.'[30] From the mid 1870s onwards, however, a whole series of previous 'luxuries' were in the process of becoming the 'new normal'. Like meat, the consumption of milk, butter and cocoa per person doubled. Eggs and fish also made important inroads, as well as fruit and vegetables. Historically, only skilled workmen, artisans and lower middle class people could afford to eat their midday meal at the tavern or a cheap eating-house. Sign of the new prosperity, a growing number of workers were now relying on pubs, taverns and food shops for their meals. As these new standards were slowly being established, others were firmly consolidated. Per capita consumption of tea and sugar more than tripled between 1850 and 1914.[31] The consumption of tea per person per year rose from 2 lbs to 7 lbs during this period.[32] Eggs, rarely eaten in the 1850s and 1860s, were obtained at the rate of 45 per person per year in 1880 and 100 in 1913; a trade in cracked eggs flourished in poorer districts.[33] Fuelled by developments in trawling and transport technologies, the consumption of fish rose substantially, as demonstrated by the meteoric rise of the fish and chip shops.[34] For the majority of the working-class, who earned between 21*s.* and 30*s.* per week, these

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[30] Brown, *The Food of the People*, p. 22.
[31] Mitchell, *British Historical Statistics*, pp. 709-11.
[32] Ralph Davis, *The Industrial Revolution and British Overseas Trade* (Leicester, 1979), p. 45.
[33] Hamish Fraser, *The Coming of the Mass Market*, p. 31; Roberts, *The Classic Slum*, p. 113.
[34] Walton, *Fish and Chips and the British Working Class*; Robb Robinson, *Trawling: The Rise and Fall of the British Trawl Fishery* (Exeter, 1996).

profound social transformations established a 'new normal', as items formerly considered luxuries became necessities.

To be sure, rising real wages were likely influenced by important regional variations in diets, like the preference for oatmeal in Scotland and the north of England, wheaten bread in the south and potatoes in the north and west of Britain. Similarly, traditional culinary regionalism obliged, cheese was more common in the counties of Staffordshire, Shropshire and Cheshire in England, and Flintshire and Denbighshire in Wales. Yet, with the development of an integrated distributive food system and the capacity to move fresh and diversified food goods in space, the period 1850-1914 also corresponds to the attenuation of these regionalisms and the gradual harmonisation of diets.

Stable at about 18 lbs between 1820 and 1846, the consumption of sugar per person per year more than quadrupled over the next decades, peaking at 91 lbs in 1901 before gradually diminishing to settle down at 80 lbs in 1914.[35] The increasingly low cost of sugar was instrumental to the creation of a whole new variety of products. Sweetmeats, an obvious favourite of the children, was not an uncommon treat in working class families, and many parents may have succumbed to the temptation or, perhaps more frequently, to their children's elaborate pleas for the sweet stuff. Another sweet delicacy—ice cream—found many obedient customers amongst working class families. In 1851, Mayhew, having 'treated of the street luxury of pine-apples', moved on 'to deal with the greater street rarity of ice-creams', which left the buyer confused as to 'how the

[35] Mitchell, *British Historical Statistics*, p. 710. See also: Sidney Mintz, *Sweetness and Power: The Place of Sugar in Modern History* (London, 1986), p. 161.

ice was to be swallowed.' One street-dealer told Mayhew that most of his customers bought out of curiosity and were gentleman's servants, doctors' boys, women of the town and what seemed like schoolboys. For 1*d.* they could buy the famous 'penny lick', a serving of ice cream in a small glass. New inroads in refrigeration pushed the trade to new heights from 1880 onwards as ice cream became more easily transportable and storable, therefore solving many of the difficulties of the trade.[36]

Much more important to people's diet, however, were two new products which appeared in the 1870s—condensed milk and jam. We shall come back to condensed milk in the next chapter. For now, suffice it to say that it was comparatively cheap and that its sweetness inhibited bacterial growth, a serious advantage given the lack of refrigeration. Jam, another heavily sweetened product, contained between 50 percent and 65 percent of its weight in sugar. Accessible to every pocketbook, it was an instant success, leading many mothers to complain of their children's greater appetite for bread. Moreover, the substance was 'the backbone of the fruit industry', with the production of domestic fruits like cherries, plums, strawberries and raspberries finding a ready market in the jam factories. For most of the urban working classes, jam was the medium through which they ate their fruit.[37] Though very few urban-dwellers could have afforded fruit before the 1870s, there was also a cultural barrier as many looked at them with suspicion. The popular belief that fruits were injurious to children's health was particularly widespread. Most certainly, the popularity of jam helped to develop a more ready acceptance, as

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[36] Mayhew, *London Labour*, pp. 206-8.
[37] Angeliki Torode, 'Trends in Fruit Consumption', in *Our Changing Fare: Two Hundred Years of British Food Habits*, in Theodore C. Barker, John C. McKenzie and John Yudkin (London, 1966), pp. 122-4.

demonstrated in the increased consumption of grapes, oranges, bananas, gooseberries, currants and prunes. Oranges, still a novelty in the middle decades of the nineteenth century, were imported at the rate of 5 million cwt in 1900, averaging 14.7 lbs per person per year. Bananas, virtually unknown to the working classes, were consumed at approximately 9 per person per year in 1900-4 and 20 in 1909-13. Other tasty novelties like melons and pineapples, however, remained inaccessible. And as suggested by the Royal Commission on the Market Rights and Tolls (1888-91), large quantities of homegrown fruit and vegetables were consumed.[38]

While deep inequalities remained entrenched in British society on the eve of the First World War, the great majority of working class' dinner tables showed substantial improvement, exposing a greater variety of foods of better quality. Diets were still stodgy, dull and starchy, but there could be no comparison with the middle decades of the nineteenth century. This is all the more impressive given that the population of England and Wales doubled between 1851 and 1911, rising from about 18 to a little over 36 million, and the population of Scotland increasing from 2.89 million to 4.75 million during the same period (Appendix B). The central role played by cheaper food was not only clear in the growing proportion of the population which experienced the satisfaction of a full belly, but also left with surplus money, a trend reinforced by the mushrooming of slate clubs and the Co-operative movement.

[38] Torode, 'Trends in Fruit Consumption', pp. 115-34; 'Royal Commission on Market Rights and Tolls' [hereafter RCMRT], 14 volumes, *PP* (London, 1888-1891).

Table 1 Life expectancy at birth and childhood mortality rate in England and Wales

	Life expectancy at birth				Childhood mortality rate (per 1,000 births)			
Decade	London	Large towns	Small towns	Rural	London	Large towns	Small towns	Rural
1841-50	36.7	32.0	36.0	44.0	317	341	310	252
1851-60	38.0	32.3	37.2	45.5	320	358	320	255
1861-70	37.7	33.0	38.0	46.5	323	355	310	248
1871-80	40.4	36.6	41.4	47.7	282	295	277	235
1881-90	42.6	39.0	44.0	51.0	265	269	249	205
1891-00	43.7	39.6	44.8	53.5	261	282	257	196
1901-10	49.4	46.3	50.5	56.5	201	219	198	173

Source: Robert Woods, *The Demography of Victorian England and Wales* (Cambridge, 2000), p. 369.

The general trend towards better nourishment was reflected at the institutional level of the state. As Lynn Hollen Lees has shown, the proportion of the population on relief in England and Wales, which stood at 17.2 percent in 1840, would remain relatively stable between 1850 and 1870, declining from 12.9 percent to 10.4 percent. We have to wait until the 1870s to finally see substantial changes, the population on relief dropping to 7.1 percent in 1880, 6.1 percent in 1890, 5.6 percent in 1900 and 1910, and 4.4 percent in 1914.[39] It should be said, however, that these figures are better understood as a rough guide to poor relief since they do not convey the extent of destitution and poverty, nor do they register fluctuating levels of temporary pauperism, nor mention the popular hatred of the institution itself, and which led many to prefer a life of chronic insecurity outside the much despised walls of the poorhouse where semi-starvation was daily offered.[40] That living standards did not show any significant improvement during the middle decades of the nineteenth century is clearly expressed by the virtually stagnant

[39] Lynn Hollen Lees, *The Solidarities of Strangers: The English Poor Laws and the People, 1700-1948* (Cambridge, 1998), p. 180.
[40] Hollen Lees, *The Solidarities of Strangers*, pp. 179-85, 294-309.

life expectancy at birth in England and Wales between 1841 and 1870, especially in the metropolis and large towns (Table 1). In fact, estimates by Simon Szreter and Graham Mooney indicate that life expectancy at birth between 1851 and 1870 declined by one year in Bradford, Liverpool, Manchester and Sheffield, and remained stable in Birmingham, Brighton, Hull, Leicester, London and Newcastle.[41] Moreover, Table 1 shows that the childhood mortality rate, in fact, increased during those years, further demolishing (for what still stands) the rickety argument of the optimistic revisionist challenge. All in all, there is but little ground to argue for rising living standards before the period 1871-1880.

'Well, there was always another hole in the belt!'

When Engels published *The Condition of the Working Class in England* in 1845, he painted a rather grim and demoralising canvass about the harsh reality of industrial capitalism. For the new economic system not only proved to be an engine of growth and wealth creation like no system before it, it also thrived through swathes of human misery and degradation. It had produced an underfed and malnourished proletariat dependent upon the market for survival, yet too poor to afford to live.

> The better paid workers, especially those in whose families every member is able to earn something, have good food as long as this state of things lasts; meat daily and bacon and cheese for supper. Where wages are less, meat is used only two or three

[41] Szreter and Mooney, 'Urbanization, mortality, and the standard of living debate', pp. 88, 106.

> times a week, and the proportion of bread and potatoes increases. Descending gradually, we find the animal food reduced to a small piece of bacon cut up with the potatoes; lower still, even this disappears, and there remain only bread, cheese, porridge, and potatoes, until on the lowest round of the ladder, among the Irish, potatoes form the sole food. As an accompaniment, weak tea, with perhaps a little sugar, milk, or spirits, is universally drunk. ... [A]mong ill-paid workers, even if they have no large families, hunger prevails in spite of full and regular work; and the number of the ill-paid is very large. ... In these cases all sorts of devices are used; potato parings, vegetable refuse, and rotten vegetables are eaten for want of other food, and everything greedily gathered up which may possibly contain an atom of nourishment.[42]

England, and to a lesser extent Scotland, was also faced with a highly disorganised food system unable to keep up with growing demand, exacerbated as it was by massive urbanisation and demographic changes. At any rate, as we shall see, food supplies remained cruelly deficient at least until the late 1860s and early 1870s, as evidenced by the horrific quality of food and the widespread use of adulteration as a way to mitigate high prices, low wages, and cutthroat competition. As historians and scholars of Great Britain have long recognised, it was only with the arrival of massive imports of cheap food in the 1870s that the supply of food started to show signs of real improvement.

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[42] Engels, *The Condition of the Working Class in England*, pp. 84-5.

For a working population already underfed in normal times, any disturbance in the labour market was likely to have significant consequences, and prolonged or 'abnormal' periods of unemployment, illness and underemployment could plunge a family into destitution within days. Sparked by the American Civil War (1861-1865), the Lancashire Cotton Famine of the early 1860s not only reminded mid-Victorian Lancashire workers that their fate was in the hands of an international economy, but also of how precariousness could quickly turn into outright deprivation. As Derek J. Oddy writes about the events, 'the population of the cotton towns experienced a major disruption of earnings which brought food shortages, nutritional deficiencies, an epidemic spread of infectious disease, and even death'.[43] In 1862, under the request of the Privy Council, Dr Edward Smith visited these populations—especially the towns of Manchester, Ashton-under-Lyne, Wigan, Blackburn, Stockport, and Preston—in order to inquire about the state of their diet.

> The impression produced upon my mind by observation of the individual operatives in reference to the degree of health which they possess in ordinary times is that it is not equal to that of other populations. The countenance, gums, and tongue are pale, the cheeks somewhat flat, the body not fleshy, and the muscles flabby, whilst the endurance of fatigue is less that that of those who live and labour in the open air.[44]

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[43] Derek J. Oddy, 'Urban Famine in Nineteenth-Century Britain: The Effect of the Lancashire Cotton Famine on Working-Class Diet and Health', *The Economic History Review*, Vol. 36, No. 1 (1983), p. 68.
[44] Edward Smith, 'Report on the Nourishment of the Distressed Operative', in 'Fifth report of the Medical Officer of the Privy Council', *PP* XXV (1863), Appendix V.3, p. 327.

Smith noted that the defective quantity of food was an important element in the unhealthy colour of the skin, further pointing out that 'excessive elimination' was common to these populations. Their appalling conditions 'in ordinary times' further declined during the famine, as they now obtained 'less of nearly every kind of food eaten, but particularly of potato, sugar, butter, meat, and milk, with a considerable diminution also of bacon and tea.'[45] In many instances, bread was the only food that remained.

Smith extended his inquiry to the worst fed populations of the country the next year. Among them were indoor workers of which five different groups retained his attention: the silk-weavers and throwsters of the districts of Spitalfields, Bethnal Green, Coventry and Macclesfield; the needlewomen of many parishes in both the east and the west of London; the kid glovers from Yeovil; the stocking and glove weavers in the small localities of Kilburn, Coxbench, Horsley, Horsley Woodhouse, Smalley, Heanor and Ilkeston in Derbyshire; and, finally, the shoemakers of the districts of Stafford and Northampton (Table 2).[46] The silk-weavers, Smith concluded, had 'a precarious and uncertain dietary' that left them 'insufficiently nourished and of feeble health.' Breakfast generally consisted of tea or coffee, sometimes without milk and sugar, accompanied by dry bread or bread and butter, dripping or treacle. Dinner was at its best on Sundays when meat, potatoes, and bread were served with either fresh vegetables or dry peas or suet or other pudding. Charles Manby Smith spoke of them as 'a patient and suffering race',

[45] Smith, 'Report on the Nourishment of the Distressed Operative', p. 362.
[46] Edward Smith, 'Report on the Food of the Poorer Labouring Classes in England', in 'Sixth report of the Medical Officer of the Privy Council', *PP* XXVII.1 (1864), Appendix 6, pp. 219-33.

exploited to such an extent as to work in 'their miserable dwellings' for up to twenty hours per day and 'leading a life of semi-starvation'.[47]

Table 2 Weekly food consumption of adult indoor workers

	Silk-weavers and throwsters	Needlewomen	Kid glovers	Stocking and glove weavers	Shoemakers
Bread (lb.)	9.5	7.75	8.75	11.9	11.24
Potatoes (lb.)	2	2.5	5.25	4	3.5
Sugars (oz.)	7.25	7.25	4.25	11	10
Fats (oz.)	4.5	4.5	7	3.5	5.75
Meat (oz.)	32 (per family)	16.25	18.25	12	15.75
Milk	1.1 pints	7 oz.	18.25 oz.	1.25 pints	18
Tea (oz. per family)	2	2	1.75	2	3.5
Cheese (oz. per family)	-	-	19	12	14

Source: Smith, 'Report on the Food of the Poorer Labouring Classes in England', pp. 219-33.

The needlewomen were said to be 'exceedingly ill fed, and show a feeble state of health.' Their wages were insufficient and not infrequently did they receive aid from the parish, generally a loaf of bread. Cheese, if eaten at all, was purchased in very small quantities, while eggs, a rare food, were obtained for the children when bacon could not be purchased. Half the family never saw butcher's meat, the other half eating for 1*d.* of sheep's brains or black pudding at Sunday's dinner. Kid glovers and stitchers hardly fared better. Limiting his inquiry to women and children, Smith found that 12 hours of work were necessary to earn the right to survive. About 70 per cent of the families ate fresh vegetables once or twice a week. Fish was rarely eaten and skimmed milk cheese was purchased. This occupation, argued Smith, produced 'ill fed and unhealthy' girls and women recognisable by their paleness, thin and sensitive skin, and emaciated and weak

[47] Charles Manby Smith, *The Little world of London* (London, 1857), pp. 303-4.

look. Short of consuming enough food to secure physical health, they in fact 'were consuming their health and losing the pleasures of life for the barest pittance.'

Even when helped by the members of his family, the stocking and glove weaver was condemned to be 'a poor man, ill fed and ill clad, and without provision for the future.' The majority had small gardens, and green vegetables were universally eaten. Butcher's meat and bacon would also be obtained, whilst fish appeared only rarely. Of those 50 percent who ate eggs, most came from their own fowl. Judging their health to be relatively good compared with silk-weavers, Smith noted that 'they are more generally pallid, and the wives complain of feeble health.' And the pale and weak look of third-class shoemakers did not offer a more positive picture of this class of workers. As Wohl notes:

> The lank-haired, hollow-chested creatures who stare out at us from the illustrations of Doré, or from the pages of *Punch*, the *Illustrated London News*, or *The Graphic*, were no exaggeration, no artist's license, no mere rhetorical devise. They graphically illustrate a race condemned by poor nutrition.[48]

In this context, any unpredictable event would have disrupted the fragile equilibrium between undernourishment and starvation, as even better-off sections 'could quite easily be pulled down to the same or to an even lower level by unavoidable misfortune – the

[48] Anthony S. Wohl, *Endangered Lives: Public Health in Victorian Britain* (London, 1983), p. 57.

death of the chief wage-earner, accident, sickness, old age or infirmity.'[49] The precariousness of people's diet pushed many into criminality, like the son of a lime-burner in Southwick who in the early 1860s was forced to steal in order to eat. Caught, he passed a fortnight in jail where he was whipped. 'I am convinced that thousands suffer from great deficiency of the necessaries of life,' said Brown, 'the result of causes over which they have no control; and to a certainty this unhappy boy possessed no control over the circumstances which instigated his first step in crime.'[50]

In his book *The Healthy Body and Victorian Culture* (1979), Bruce Haley argues that the ongoing preoccupation of the Victorian minds with health was a direct result of the appalling conditions of life.[51] The paucity of working class' diets was repeatedly shown in their low resistance to infectious diseases, especially during the hot season.[52] As James Beek put it before the Metropolitan Sanitary Commission in 1847, 'The per centage [of typhus] is less there [Hackney] than at Bethnal Green, where the people are starving; and if the gentry were reduced by want of food, bad lodging, and bad clothing, to the same situation as those people are, the state of things would be reversed.'[53] Underfed populations were ill equipped to fight airborne, water- and food-borne diseases. Waves of cholera, influenza, smallpox, tuberculosis, typhus and typhoid combined with the social plagues of poverty, unemployment and the lack of sanitary facilities and infrastructure to produce an environment conducive to low life expectancy. In spite of

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[49] Burnett, *Plenty & Want*, p. 197.
[50] Brown, *The Food of the People*, p. 11.
[51] Bruce Haley, *The Healthy Body and Victorian Culture* (Cambridge, 1979).
[52] Smith, 'Report on the Nourishment of the Distressed Operative', p. 320.
[53] 'First Report of the Metropolitan Sanitary Commission for the improvement of the health of the metropolis', *PP* XXXII (1847-48), p. 171 (Beek).

important progress then, life for millions remained at best precarious. In this respect, the publication of *The People of the Abyss* by Jack London in 1903 struck at the heart of the smug attitude of Edwardian Britain. His description of London's East End as 'one unending slum' and the appalling conditions of life in which people lived remains a vivid testimony of the importance of asking the question 'progress for whom?'

London's book arrived at a crucial moment, too. Indeed, when Sir William Taylor, Director General of the Army Medical Service, sent a Memoranda in 1902 from the War Office reporting that, according to the Inspector General of Recruiting, between 40 percent and 60 percent of army recruits were found unfit to carry a rifle, the whole debate over 'national efficiency' reached new proportions. Taylor's intervention fuelled and channeled the bourgeois moral panic that had developed during the 1880s and 1890s. Growing anxiety over a declining birth rate, mounting imperial, industrial and commercial competition, the 'discovery' of the appalling conditions of life of agricultural labourers—long held as the repository of the strength of the nation, and the mediocre performance of the army during the Boer Wars (1899-1902) had prepared the ground for eugenics, biometricians and other racists to argue that a progressive physical, intellectual, cultural, and moral degeneracy of the English 'race' was taking place.

The Inter-Departmental Committee on Physical Deterioration was created in order to investigate these allegations and throw light into the issue. In its report, the committee recognised the resilience of physical deterioration amongst the poorest classes, yet argued

that the general health of the nation was, in fact, improving.[54] As D. J. Cunningham argued at that time:

> the class from which recruits are derived varies from time to time with the condition of the labour market. When trade is good and employment plentiful it is only from the lowest stratum of the people that the army receives its supply of men; when, on the other hand, trade is bad, a better class of recruit is available. Consequently the records of the recruiting departments of the army do not deal with a homogeneous sample of the people taken from one distinct class.[55]

Paradoxically, it was the trade boom accompanying the Boer Wars that absorbed a greater proportion of unskilled boys within industrial capitalism and thereby forced authorities to recruit amongst the lowest classes. 'Your soldier,' said George Bernard Shaw in 1895, 'ostensibly a heroic and patriotic defender of his country, is really an unfortunate man driven by destitution to offer himself as food for powder for the sake of regular rations, shelter, and clothing'.[56] Taylor himself would later recognise that 'when we get our half-starved recruits from the slums or the lanes of the country, the first thing you ought to do is to take care of them and give them good food, as they do in the Navy, and afterwards try to improve their muscular development.'[57] Taken on their own, then, generalisations based solely on the records of the recruiting departments of the army were

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[54] IDCPD, Vol. 1, *PP* XXXII.1 (1904).
[55] IDCPD, Vol. 2, Q. 2188 (Cunningham). See also: IDCPD, Vol. 1, p. 2.
[56] George Bernard Shaw, *The Impossibilities of Anarchism*, Fabian Tract No. 45 (London, 1895), p. 25.
[57] IDCPD, Vol. 2, Q. 67 (Taylor).

likely to be misleading, especially given that in the absence of conscription, the army was forced to compete in the labour market with other working class occupations.[58]

Besides, the trauma caused by the defeat of the imperial army in South Africa forced the capitalist class to confront the relationship between national defense and the condition of the working class. As Richard Soloway has argued, the different theories of progressive degeneration 'tell us much more about middle- and upper-class perceptions, attitudes, fears and hopes about change in the opening years of the twentieth century than they do about the physical, social and biological realities contemporaries thought they were measuring.'[59] The sentiment of moral superiority of the ruling class had been seriously undermined in the late 1880s with the publication of Booth's *Life and Labour of the People*, an extensive social survey that revealed that 30.7 percent of the London's population lived in poverty. More specifically, 8.4 percent of the population was considered very poor, living with less than 18*s.* per week, and 22.3 percent was defined as poor, living with an average weekly income of 18*s.* to 21*s.*[60] Booth's findings were upheld by B. Seebohm Rowntree's study of poverty in York in 1901. His extended survey of 11,560 poor wage-earning families revealed that 27.84 percent of the total population of the city lived in poverty, itself divided into primary poverty (9.91 percent) – i.e. those 'families whose total earnings are insufficient to obtain the minimum necessaries for the maintenance of merely physical efficiency' – and secondary poverty (17.93 percent) – i.e. those 'families whose total earnings would be sufficient for the

[58] Floud, Wachter and Gregory, *Height, health and history*, pp. 31-2.
[59] Richard Soloway, 'Counting the Degenerates: The Statistics of Race Deterioration in Edwardian England', *Journal of Contemporary History*, Vol. 17 (1982), p. 138.
[60] Charles Booth (ed.), *Labour and Life of the People*, Vol. 1: East London (London, 1889), p. 33; Charles Booth (ed.), *Labour and Life of the People*, Vol. 2: London, Second Edition (London, 1891), p. 21.

maintenance of merely physical efficiency were it not that some portion of them is absorbed by other expenditure, either useful or wasteful.'[61]

The importance of both studies was twofold. First, they confirmed the resilience of poverty amidst plenty, shedding light on the existence of an important segment of the working-class, economically marginalised and socially confined to chronic distress. Second, and related to this, both social surveys shattered the bourgeois idea that poverty was the result of moral failure and personal, self-inflicted choices. By demonstrating that poverty was mostly caused by variables outside of their control (e.g. low wages, cyclical unemployment, death of the chief wage earner), their findings highlighted the existence of an important class of casual workers and the working poor with no hope whatsoever of working themselves out of poverty. In stark contrast to the bourgeois ideology of self-help and hard work, both authors did not simply document the extent to which industrial capitalism proved structurally incapable of fulfilling its promise of a better tomorrow for a substantial segment of the working class, but also how it in fact tended to produce what Marx had called the 'reserve army of labour', thus preparing the ideological ground for state intervention. In addition, Rowntree's study was important in that it challenged the assumption that poverty was limited to London – a notion that would be entirely destroyed through subsequent surveys.[62]

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[61] B. Seebohm Rowntree, *Poverty: A Study of Town Life* (New York, 1971[1901]).

[62] P. H. Mann, 'Life in an Agricultural Village in England', *Sociological Papers*, Vol. 1 (1904), pp. 163-93; Maude Frances Davies, *Life in an English Village: An Economic and Historical Survey of the Parish of Corsley in Wiltshire* (London, 1909); Maud Pember Reeves, *Family Life on a Pound a Week*, Fabian Tract No. 162 (London, 1914[1912]); Pember Reeves, *Round About a Pound a Week*; Arthur L. Bowley and A. R. Burnett-Hurst, *Livelihood and Poverty: A Study in the Economic Conditions of Working-Class Households in Northampton, Warrington, Stanley and Reading* (London, 1915); Arthur L. Bowley and A.

Of course, poverty was place specific. For instance, poor families in Barrow and Lancaster were probably better-off than their counterparts in large towns. Evidence suggests that from one-third to one-half of the former had access to an allotment where they grew an impressive variety of fruit and vegetables to which they added meat 'to make a variety of soups, broths, stews and other casseroled dishes.' As Elizabeth Roberts explains, these plots contributed to the 'widespread availability and cheapness' of home-grown vegetables and fruits, which no doubt held in check the ability of 'commercial greengrocers [to] maintain very high prices in the face of such competition.'[63] However important the access to one's own means of substance may have been for those families, such a possibility was virtually absent for the great majority of the working poor which tended to be concentrated within large urban settings. For them, as Arthur Morrison wrote, life was a constant struggle to keep the wolf from the door.

> It had been a bad day, without a doubt. Things were bad generally. It was nearly a fortnight since Ned had lost his last job, and there seemed to be no other in the world. His mother had had no slop-waistcoat finishing to do for three or four days, and he distinctly remembered that rather less than half a loaf was left after breakfast; so that it would never do to go home, for at such a time the old woman had a trick of pretending not to be hungry, and of starving herself. ... Luck must

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R. Burnett-Hurst, *Economic Conditions of Working-class Households in Bolton, 1914: Supplementary Chapter to 'Livelihood and Poverty'* (London, 1920).

[63] Elizabeth Roberts, *A Woman's Place: An Oral History of Working-Class Women 1890-1940* (Oxford, 1995), pp. 157, 158.

change. Meanwhile, as to being hungry—well, there was always another hole in the belt![64]

Women, Household and the Uneven Distribution of Food

As Morrison suggests, while average consumption figures are helpful in illuminating general trends, they are also susceptible to reproducing certain histories and narratives over others. One must therefore be suspicious of generalisations based on understandings of the household as a coherent, self-reproducing unit within which food was equally distributed.[65] In 1913, when Mrs B came back from a fortnight at the seaside, she found her husband apologising 'for not making the money go as far', admitting his bad management of the first week as he had 'to borrow 5s. as well as [put] the whole of [his pocket] money in the house.' As Maud Pember Reeves noted:

> The enormous consumption of margarine—3s. 6d. as against 1s. 6d.—is an instance of the way in which the father is kept in ignorance of the privations which are undergone by his family. Directly he was left in charge, this father allowed margarine all round on the same scale as he had always used it himself, the result of more than doubling the amount spent on it.[66]

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[64] Arthur Morrison, *Tales of Mean Streets* (New York, 1895 [1894]), p. 94.
[65] Laura Oren, 'The Welfare of Women in Laboring Families: England, 1860-1950', *Feminist Studies*, Vol. 1, No. 3/4 (1973), p. 107.
[66] Pember Reeves, *Round About a Pound a Week*, pp. 171-2.

While this example demonstrates the extent to which women held financial responsibilities over household management, it is also instructive as it shows that even in better times the proper nourishment of the male breadwinner and the allocation of his pocket-money for drinking, tobacco, and other luxuries was premised upon the relative—and in poorer families, absolute—deprivation of the other members of the family, whose reduced portions improved his own.

The unease voiced by many men regarding their eating provides an interesting window into the internal dynamics surrounding food distribution in the family.

> As Dorothy Scannell remembered, her father, Walter Chegwidden, often took his superior meals in private, for he disliked the "pairs and pairs of intensely staring eyes" that accompanied him as he bit into "some delicacy which the rest of us had not received." "Sometimes," Scannell continued, "he would rub the top of his head uncomfortably and say to Mother, 'Haven't the children had their dinner? Have you given them enough to eat? They are looking at me as though I have robbed them.'"[67]

It is therefore not surprising that 'much fun and jollity' would arise when generous fathers saved 'a bit of their 'relish' – the tail of a finnan haddock, the top of a boiled egg

[67] Ross, *Love and Toil*, pp. 35-6.

– and give it to each child in turn',[68] the significance of which was greater in poorer families where children survived on bread, potatoes, margarine, jam, and scraps of meat.

Moreover, defective cookery was common amongst poor working-class families. The high price of fuel, especially in the south of England, as well as insufficient utensils, cooking facilities and appliances at home further limited housewives.[69]

> Most cooking was done, of course, on the open fire, though single gas rings has come rapidly into general use. The frying pan, because of the ease and speed with which it produced cooked food, was the most esteemed utensil... Tea the woman of the house brewed in her husband's pint pot: the teapot being a luxury article unbought by the lowest social order; so too was the cup. Parents and perhaps wage-earning children supped from pint pots, the rest from half-pound stone jam jars.[70]

Moreover, the general lack of proper storage facilities, which was particularly acute in poorer neighbourhoods, greatly limited any attempt at saving by purchasing 'larger' quantities, and could also constitute a health hazard. 'The only place where she could keep the milk was a basin with an old piece of wet rag thrown over it. The visitor found seven flies in the milk, and many others crawling on the inner side of the rag.' The lack of proper storage in houses where mice were common was a constant source of anxiety

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[68] Roberts, *The Classic Slum*, p. 117.
[69] Burnett, *Plenty & Want*, pp. 57, 185-6; 'Fifth Report of the Medical Officer of the Privy Council', p. 339; IDCPD, Vol. 1, pp. 33, 42, 57, 88; Wohl, *Endangered Lives*, pp. 48-9.
[70] Roberts, *The Classic Slum*, pp. 108, 110-1; Brown, *The Food of the People*, p. 43; Thomas R. Marr, *Housing Conditions in Manchester & Salford* (Manchester, 1904), p. 48.

since 'no place is safe for food but a basin with a plate over it.'[71] Furthermore, the lack of storage and cooking facilities was seen both in the loss of cooking knowledge and in the heightened dependence of families on the market for specific services (e.g. baker, brewer, greengrocer, butcher). In this context, attempts by well-intentioned middle- and upper-class reformists to provide poor working-class families with recipes and cookbooks in order to maximise household budgets was often a painful reminder of the social, cultural and political-economic gap separating the two.

Wives were under constant pressure to make the most out of what was often an insufficient budget.[72] Sidney Champion from Leicester recalls how his mother planned the budget for the week: 'Every penny of her twenty shillings was placed on the table. With pencil and paper she reckoned where each halfpenny was going – and wondered how she could cater for us after having paid for the fixed amounts like rent, insurance, clothing club and repayment of debts.'[73] They were also responsible for meeting their husband's specific demands, like the case of Mr. Q. demanding '1s. 1d. to be spent weekly on himself alone for relishes at breakfast or tea', and the anxiety in meeting these different demands was frequently expressed in one's relationship with money. 'A woman ... will sleep with her purse in her hand or under the pillow, and during the daytime she doles out with an anxious heart the pennies for gas or the two-pences for father's relish.'[74] Some housewives devised countless ingenious strategies to save a penny here

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[71] Pember Reeves, *Round About a Pound a Week*, pp. 110, 105-6
[72] Roberts, *A Woman's Place*, p. 151.
[73] Sidney Champion, cited in Christopher P. Hosgood, 'The 'Pigmies of Commerce and the Working-Class Community: Small Shopkeepers in England, 1870-1914', *Journal of Social History*, Vol. 22, No. 3 (1989), pp. 441.
[74] Pember Reeves, *Round About a Pound a Week*, pp. 104, 122.

and there to make money go further. Others were less understanding: 'One mechanic, I remember, after a violent quarrel with his wife found next day that lunch consisted of the rent book between two slices of bread.'[75] Of course, gender norms were not fixed, and some women challenged, if not their husband's authority, at least what they felt entitled to. Too often, however, women went short on food, sacrificing their physical integrity in order to reconcile the contradictions that arose between a gendered capitalist system which thrived on their unpaid labour, and a household economy that aimed to meet the needs of its members.

Women and children thus invariably embodied a different history, bearing the brunt of the unequal distribution of food in the household. As Edward Smith wrote in 1865:

> The wife, in very poor families, is probably the worst-fed of the household. On Sundays she generally obtains a moderately good dinner, but on the other days her food consists mainly of bread with a little butter or dripping, a plain pudding and vegetables for dinner or supper, and weak tea. She may obtain a little bacon at dinner once, twice, or thrice a week; but more commonly she does not obtain it.[76]

Housewives were all too aware that the social reproduction of the household depended upon the health of the male breadwinner, and therefore daily made the conscious sacrifice

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[75] Roberts, *The Classic Slum*, p. 112.
[76] Edward Smith, *Practical Dietary for Families, Schools, and the Labouring Classes* (London, 1865), pp. 199-200. See also: Brown, *The Food of the People*, pp. 33-4.

of underconsumption. It is perhaps not surprising that given the paucity of these diets, almost all the cases of scurvy witnessed among cotton workers in 1863 in Stockport, Preston, Blackburn, and Salford, as well as the alarming level of anaemia, were in women.[77] Anaemia, physical debility, premature confinements, bad teeth, chronic digestive troubles, and the uneven distribution of food amongst the members of the household were still prevalent among poor women in the early 1910s.[78] 'The father of the family', said Pember Reeves in 1914, 'cannot eat less. He is already eating as little as will enable him to earn the family wage. To starve him would be bad economy. He must fare as usual. The rest of the family can eat less without bothering anybody—and do.'[79] For the mass of working poor receiving 'scandalously low' wages, precariousness was a permanent condition of life, 'a large proportion of whom [were] married women with a bitter knowledge of the grip of hunger and rent.'[80] Most meat was eaten by their husbands and whatever was left from the Sunday dinner would be held back to provide him with meat during dinners throughout the week. The husband always obtained more nutritious food. As Oddy rightly argues, 'dietary change in the nineteenth century took place initially through the male wage earner's food consumption, before later – and in some cases quite a long time later – becoming the pattern for the whole family.'[81]

The gendered distribution of food was also cultural. Take the case of beer. Drank by virtually everyone during medieval times, it had become a man's drink by the mid-

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[77] 'Fifth Report of the Medical Officer of the Privy Council', pp. 302, 320.
[78] Pember Reeves, *Round About a Pound a Week*, pp. 36, 70, 107-8.
[79] Pember Reeves, *Round About a Pound a Week*, pp. 68.
[80] Arthur Sherwell, *Life in West London: A Study and a Contrast* (London, 1901[1897]), p. 82.
[81] Derek J. Oddy, 'The paradox of diet and health: England and Scotland in the nineteenth and twentieth centuries', in *Order and Disorder: The Health Implications of Eating and Drinking in the Nineteenth and Twentieth Centuries*, ed. Alexander Fenton (East Linton, 2000), p. 46.

nineteenth century, tea being considered a better drink for the 'fair sex'. Certainly, alcohol was an important drain on the budget of many poor households, women and children often going short on food in order to sponsor the social life of the husband at the public house. But this cultural bias also meant that the already disproportionate share of the food consumed by the husband was supplemented with beer. Annual average consumption of beer per head of the population peaked to 34 gallons in the mid-1870s, dropped to about 29 gallons in the early 1880s, and reached 25 gallons in the early 1910s. While the price of the pint of beer remained constant between 1870 and 1914 at 2.5*d.*, total consumer expenditure on drink, including spirits and wine, dropped from 15 percent in 1876 to 8.5 percent in 1911.[82] Beyond quantity, however, beer is a refreshing drink of considerable nutritional value, 'a pint of beer having a calorific value of between 200 and 400 depending on the strength of the brew, considerably more than the tea which was playing an increasingly important part in working-class diet.'[83] Some women, of course, claimed their fair share of the 'dancing juice', while others valiantly tried to reform their husbands: 'I've gone into the public and tipped up the table where he was drinking,' said Mrs S., 'and once when he struck me I gave him a black eye, than and there, and he's never touched me since.'[84] More often, however, women had to deal if not with a violent husband, at least with the violence of the limited budget with which he left her, necessitating further deprivation. The uneven distribution of food in the household thus

[82] Dingle, 'Drink and Working-Class Living Standards in Britain, pp. 117-21.
[83] Dingle, 'Drink and Working-Class Living Standards in Britain', p. 122.
[84] Ross, *Love & Toil*, p. 44.

combined with the uneven distribution of food in society to produce uneven bodies in and through the social fabric.

Although improvements in diets after 1873 were significant for the great majority, little had changed for the poorest segments of the working population, which continued to cope with poverty through the uneven food distribution in the household. In his survey of York in 1899, Rowntree noted:

> We *see* that many a labourer, who has a wife and three or four children, is healthy and a good worker, although he only earns a pound a week. What we do *not see* is that in order to give him enough food, mother and children habitually go short, for the mother knows that all depends upon the wages of her husband.[85]

As he further wrote, 'the pinched faces of the ragged children told their own tale of poverty and privation.'[86] Young girls were the worst-fed as mothers often felt 'that they didn't need much – 'not the same as lads'. In the streets, therefore, none looked more pathetically 'clemmed' than the little schoolgirl',[87] a canvass already painted by Mayhew who noted that girls in London, rarely able to eat meat, looked pale and thin.[88] The socially differentiated embodiment of food through gendered, class and generational relations and norms was visible to anyone who dared to look at the underfed, pale, feeble, weak, thin, and anaemic bodies.

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[85] Rowntree, *Poverty*, p. 169n1. See Roberts, *The Classic Slum*, p. 110.
[86] Rowntree, *Poverty*, p. 149. See also: IDCPD, Vol. 2, Q. 437 (Eichholz).
[87] Roberts, *The Classic Slum*, p. 109.
[88] Mayhew, *London Labour*, pp. 48, 151.

Women's struggle for survival was also evidenced by the very high rate of infant mortality amongst 'illegitimate' infants, which was often nearly double the ratio of legitimate children. For instance, infant mortality in Glasgow was 147 per 1,000 births for legitimate infants and 302 for illegitimate ones in 1893, and 126 and 244 respectively in 1902.[89] Single mothers raising a child on their own not only had to endure a double day of labour, but to make ends meet with an insufficient wage. Indeed, women's labour-power was systematically worth less in the labour market, and very frequently 50 percent less than men's. Moreover, they often had to leave their child for long periods of time, factory hours systematically frustrating the different pace and approach to the notion of time that childbearing and childrearing demand. Chronic poverty and hunger was almost always *de rigueur* for these women, their poor health necessarily transmitted to the infant in one way or another. Thus, high a rate of infant mortality amongst illegitimate infants simply remained an extreme generational form of the more general condition associated with a gendered system of capital accumulation whereby women's bodies reconciled the contradictions between the formal economy and the household.

Examined before the Inter-Departmental Committee on Physical Deterioration in May 1904, Dr Lewis A. Hawkes was troubled by what he called the 'auto-starvation' of the women and mothers, and could not understand how it was that men and boys fed themselves properly. The following exchange between the Chairman of the Committee and Hawkes is telling of the ways in which gender norms, mixed with a middle class contempt for the working class, organised and defined one's worldview.

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[89] IDCPD, Vol. 3, Appendix 11, Table D, p. 26.

(*Chairman.*) I should have thought that their desire to feel fit would have made them feed themselves sufficiently?—(*Hawkes.*) Yes, but they are so hopelessly ignorant in matters of that kind. I was led to make observations, and 80 per cent. of the women who came to me when I was at the dispensary lived in that way.

[Chairman] I should have thought it was the primary human instinct to eat enough food if it could be got?—[Hawkes] But to show how little it is understood and how little it is taken up I may tell you that I used to be spoken of as "the doctor who asked people if they had had any breakfast."

[Chairman] As though they thought it was a monomania on your part?—[Hawkes] Exactly; as if it were a fad of mine.[90]

Now, to believe that both women and girls were starving themselves because they did not understand 'the primary human instinct to eat enough food' must stand as the pinnacle of stupidity. In fact, Hawkes and his interlocutor did not even seem to realise that in referring to the former as 'the doctor who asked people if they had had any breakfast,' people were in fact making fun of him. Arguably, the only ones who were 'hopelessly ignorant' in this case were these two well-educated, middle-class men completely oblivious of working class reality.

[90] IDCPD, Vol. 2, QQ. 13,123-5 (Hawkes).

Embodied Contradictions: Capital and the Production of Uneven Bodies

The profoundly inhuman physical and psychological violence perpetrated by chronic hunger and undernourishment was embodied in multiple ways. The socially perpetrated crime of deprivation is even crueller when it is borne in mind that it was repeatedly committed in the richest nation human history had ever seen. The weight loss, muscle wasting and atrophy that occurs as the body breaks down tissues for energy and starts eating itself, as well as the bruising and dental difficulties commonly associated with hunger were all too common in mid-Victorian Britain, and constituted a sure reminder of deep seated inequalities. Furthermore, the poor health prompted by a weakened immune system made the individual more vulnerable and weak to fight off diseases such as cholera, influenza, measles, dengue, pneumonia, tuberculosis, typhus and typhoid. While vitamin deficiency can lead to beriberi, pellagra and scurvy, iron deficiency produces irritability, pallor and weakness, and iodine deficiency mental retardation and brain damage. More generally, symptoms of undernourishment and hunger include fatigue, lethargic and apathetic behaviour, dizziness, faintness or light-headedness, headaches, lack of concentration, and nausea. There was indeed no shortage of schoolteachers to report on the 'dullness' and 'feeble mindedness' of their pupils, and a retired teacher from Leeds recalled how in the early 1870s 'his children used not infrequently to faint from lack of food and neglect.'[91] As the body slows down both physical and mental activities in order to compensate for the lack of energy, the

[91] IDCPD, Vol. 2, Q. 552 (cited by Eichholz).

individual's capacity to concentrate, participate, study and take initiative is diminished. It is indeed my argument that capital's contradictions were nowhere better expressed than through the mass production of pale, stunted, thin, unenergetic, weak, feeble and anaemic bodies. Capital's contradictions are embodied, literally embodied.

An extensive anthropometrical survey undertaken by the British Association for the Advancement of Science between 1878 and 1883 was designed to collect information on 'the height, weight, and other physical characters of the inhabitants of the British Isles.'[92] Although couched in the language of scientific racism, the Report is nonetheless illuminating in many respects. Thirteen year old boys in an industrial school at Swinton, near Manchester, were found to be 52.5 inches tall and weighed 70 lbs. Their comrades 'of a class living under most favourable conditions' at the Friends' (Quakers') School at York embodied a quite different story, standing 60 inches tall and weighing 95 lbs on average.[93] In his study of poverty in York, Rowntree discovered that the height of thirteen year old boys and girls of the highest section of the working class averaged 58.5 inches and 58 inches, respectively, standing some 3.5 inches and 1.25 inches taller than the poorest section. The average weight of the children from the poorest section was 73 lbs for the boys and 79.25 lbs for the girls, respectively 11.25 lbs and 4 lbs less than their better-off comrades.[94] Similar evidence was given in England for Leeds, London and

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[92] Francis Galton, 'Final Report of the Anthropometric Committee', *Report of the Fifty-Third Meeting of the British Association for the Advancement of Science, 1883* (London, 1884), p. 253.
[93] Galton, 'Final Report of the Anthropometric Committee', pp. 298-9.
[94] Rowntree, *Poverty*, pp. 250-1.

Manchester,[95] and in Scotland for Aberdeen, Edinburgh and Glasgow. Education officers in Bradford reported that poor children were 2.5 inches shorter and up to 6.5 lbs lighter.[96]

In their seminal study, Roderick Floud, Kenneth Wachter and Annabel Gregory have shown that the mean height of military recruits showed a slow increase until the later 1840s, a moderate decrease until about 1890, and then a rapid increase thereafter. Furthermore, they show that the percentage of recruits rejected by the Army Medical Department on medical inspection rose from 37.6 percent in 1868 to 45.9 percent in 1888, declining from then on to reach 28.2 percent in 1908.[97] Their findings thus suggest lower dietary and nutritional achievements for the generation born in the early 1830s and reaching adulthood *c.*1850. Similarly, an upward trend from the late 1880s and early 1890s onwards tends to reinforce the view that children born in the early 1870s were probably the first generation to substantially benefit from better nourishment. In spite of these newly embodied achievements, it is doubtful that for the substantial minority mired in the squalid poverty of unemployment and underemployment, life showed any improvements. Jack London recalls how one man from the abyss—'skin an unhealthy colour, body gnarled and twisted out of all decency, contracted chest, shoulders bent prodigiously from long hours of toil, and head hanging heavily forward and out of place!'—boasted that, in comparison to his 'chaps at the shop', he was, at 5'2'' and 10

[95] IDCPD, Vol. 3, Appendix 19, pp. 73-80 (Eichholz); Appendix 22, p. 85 (Campagnac and Russell).
[96] 'Royal Commission on Physical Training (Scotland)', Vol. 1, Appendix 9, pp. 73-119; Margaret Alden, *Child Life and Labour* (London, 1908), pp. 37-8.
[97] Floud, Wachter and Gregory, *Height, health and history*, pp. 62, 135-54.

stones (140 lbs), quite 'a fine specimen of manhood'. As it happened, our well-fed American chose not to share with his new companion that he weighted 170 lbs.[98]

Vitamin A is essential for cardiovascular health, healthy skin and bones, embryonic maturity in pregnant females, and the maintenance of good eyesight. Deficient dietary intakes of carrots, meat, eggs, dairy products and fish—all important sources of Vitamin A—can help to explain the poor's bad eyesight.

> The eyesight of Board schoolchildren was as defective as their teeth. In London in 1896 Dr Brudenall Carter found that 61 per cent of 8,125 children lacked 'normal vision'. Among 588 Govan children in 1901, only 55 per cent had 'full vision'. Of the remainder, almost a half had 'less than half ... vision', and nearly all of the 45 per cent 'complained of headaches and pain in the eyes on reading'. ... Dr Wright Thomson found that 25 per cent of children in Glasgow charity schools in 1907 had 'functionally defective eyes', compared with 3 per cent in an 'outer middle class school'.[99]

Defective eyesight was an obvious class-based impairment, which was further reinforced by the gendered distribution of food amongst children. 'In those surveys which differentiated by sex,' noted Barrymore Smith, 'girls had about a 33 per cent worse rate of impaired vision, possibly resulting from nutrition even more deprived than that of the

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[98] Jack London, *The People of the Abyss* (London, 2001[1903]), pp. 27-8.
[99] Barrymore Smith, *The People's Health*, pp. 181-2.

boys.'[100] Visual impairment as a result of insufficient nutrition, like many other diseases in fact, was a strong reminder that poverty amidst the unmistakable progress of a nation plagued by hunger and starvation did not contradict the precepts of industrial capitalism and wealth creation.

The 'English Disease'

Under- and malnourishment was nowhere more visible than in the production of rickety bodies. Revealingly called the 'English disease' (or the 'Glasgow disease' in Scotland, though Edinburgh slums were fierce contenders), rickets was caused by a lack of calcium or phosphate and vitamin D leading to the softening and weakening of the bones. Bent limbs, 'pigeon' chest, stunted growth, flat feet, and bad teeth were as many physical conditions for those children who had survived the first years of their lives and managed to live in spite of deficient nourishment. In a series of lectures delivered at the Hospital for Sick Children in December 1859 and January 1860, Sir William Jenner described some of the most striking features of rachitic deformities:

> The general aspect of the rickety child is so peculiar, that when the crooked limbs, the large joints, and the deformed thorax are concealed, you may even detect its ailment at a glance. Its square face, its prominent forehead, its want of colour, its large, staring, and yet mild eyes, its placid expression, and its want of power to

[100] Barrymore Smith, *The People's Health*, p. 182.

support itself, like other children of its age, on its mother's arm, all conspire to form a picture which has no like in the gallery of sick children.[101]

The spine was often bent, and the femur and tibia showed a visible curvature as a result of the softening of the bones. Both the pelvis and the thorax became deformed, with the sternum 'thrown forwards', and rachitic individuals were characteristically undersized as a result of the arrest of growth of the bones. Teething generally occurred much later than in healthy children, and not surprisingly mothers were often struck by the general tenderness of their infants.

Although there was no shortage of opinions in the pages of the *British Medical Journal* on the etiology of rickets during the second half of the nineteenth century, it was already widely recognised by 1860 that rickets was 'essentially and purely a disease of nutrition'.[102] Referring to the Registrar-General's annual report for 1862, Brown entertained no doubt that the 'enormous excess of deaths at the younger ages' was caused by deficient nourishment, itself caused by the 'politico-economical truth' that is the 'cold grasp of poverty'. The survivors, he further argued, 'will probably be presented to the physician or surgeon, as the case may be, with softened and yielding bones ill-fitted to sustain the weight placed on them, with their spines distorted and their limbs feeble'.[103] The Annual Report of the Registrar-General reported 324 deaths from rickets in England

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[101] Sir William Jenner, *Clinical Lecture and Essays on Rickets, Tuberculosis, Abdominal and Other Subjects* (London, 1895), p. 42.
[102] Jenner, *Clinical Lectures*, p. 43.
[103] Brown, *The Food of the People*, p. 9.

from 1859 to 1863, 535 from 1864 to 1868, and 731 from 1869 to 1873.[104] But this was, as always, only the tip of the iceberg, not only because underfed and weak rachitic infants were likely to die from other diseases, but also because a great many survived their deformed childhood.

As it happened, decades of chronic poverty and hunger were taking their toll on the poorest segments of the working-class, reproducing actual physical and psychological inequalities across generations. Anthony S. Wohl hit the nail on the head when he said that 'it would not be an exaggeration to say that the *majority* of English children [in Victorian Britain] grew up ill-formed and ill-equipped to lead vigorous lives or to sustain the heavy labour which was their lot'.[105] According to Jenner, rickets in 1860 was the most common disorder among the chronically underfed and malnourished children of the poor in London.[106]

> By 1870 it was admitted that a proportion as high as one-third of the poor children of cities such as London and Manchester were suffering from obvious rickets. It is important to remember that such estimates were based on easily recognisable symptoms, bent limbs, rickety chest, etc., and that had there been available modern methods of diagnosis by X-rays, which detect much earlier stages and milder forms of the disease, the proportion would have been far higher.[107]

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[104] 'Mortality from Rickets', *The British Medical Journal*, October 16 (1875), p. 511.
[105] Wohl, *Endangered Lives*, p. 57.
[106] Jenner, *Clinical Lectures*, pp. 9, 48.
[107] Drummond and Wilbraham, *The Englishman's Food*, p. 380.

Chilling figures like these were reported over a decade later in Scotland. James Thomson gave troubling evidence on the prevalence of rickets in Glasgow and the West of Scotland in the early 1880s.[108] Thomson's methodology is, in itself, disarming. Between July 15, 1881 and November 29, 1883 he spent 39 days standing outside in different localities and counted the number of children suffering from visible deformities, and found that in certain poor localities every second child between the ages of 3 and 7 suffered from rachitic deformities. Now, it will appear obvious even to the most rigorous scientific mind that the problem at hand here has absolutely nothing to do with the 'method' employed by Thomson in carrying his investigation, and that rates of *visible* rickets like these reinforce the opinion expressed by Drummond and Wilbraham and Wohl that rickets, including its milder forms, was rife, especially in large, industrial towns.

The British Medical Association (BMA) conducted a collective investigation in 1889 and found two general principles regarding the geographical distribution of rickets. First, rickets was said to be more concentrated in 'large towns and thickly peopled districts, especially where industrial pursuits are carried on.' Second, rickets in rural districts tended to be concentrated in the south where wages were generally lower. The Collective Investigation Committee responsible for the report circulated a copy of the inquiry to every registered medical practitioner in the United Kingdom. The following question was asked:

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[108] James Thomson, 'On the Prevalence of Rickets in the City of Glasgow and in the West of Scotland, and the Relation of Rickets to the Food and Water Used', *Proceedings of the Philosophical Society of Glasgow*, Vol. 15 (1884), pp. 232-59.

> Are the following diseases, or any of them, common in your district; that is, would a medical man in average practice in it be likely to meet with, on the average, a case a year?
>
> *Rickets.*—Bent bones, usually the leg bones, accompanied often with enlargement of the lower end of the radius and the sternal ends of the ribs?[109]

Results were collected and compiled according to the districts they originated from, and a coloured map that illustrated their geographical dispersion was created. Though the report ascertained the resilience of rickets, it hardly did more than that, for in setting the threshold at one case per year per practitioner, the Committee failed to produce any meaningful dataset amenable to historical comparison, and its claim that the map 'can only be interpreted in a broad and general sense' unfortunately remains the only valid conclusion. Indeed, with the rise of real wages among vast segments of the working class and their associated ability to purchase food goods in greater quantity and variety, people were showing obvious signs of improvements. Yet, because of the way it was organised, the report stated the obvious without giving any indications of the actual progress in people's health.

Rickets were still to be found in poorer districts at the beginning of the twentieth century, and Robert Roberts recalls how at the dawn of the twentieth century in the slum

[109] 'Geographical Distribution of Rickets, Acute and Subacute Rheumatism, Chorea, Cancer, and Urinary Calculus, in the British Islands', *The British Medical Journal*, Vol. 1, No. 1464 (1889), p. 113.

of Salford many children suffered from rachitic deformities such as bow-legs.[110] In a very interesting conversation between one 'bright young East Ender' and Jack London in the summer of 1902:

> 'Look at my scrawny arm, will you.' He pulled up his sleeve. 'Not enough to eat, that what's the matter with it. Oh, not now. I have what I want to eat these days. But it's too late. It can't make up for what I didn't have to eat when I was a kiddy. Dad came up to London from the Fen Country. Mother died, and there were six of us kiddies and dad living in two small rooms.
>
> 'He had hard times, dad did. He might have chucked us, but he didn't. He slaved all day, and at night he came home and cooked and cared for us. He was father and mother, both. He did his best, but we didn't have enough to eat. We rarely saw meat, and then the worst. And it is not good for growing kiddies to sit down to a dinner of bread and bit of cheese, and not enough of it.
>
> 'And what's the result? I am undersized, and I haven't the stamina of my dad. It was starved out of me. In a couple of generations there'll be no more of me here in London. Yet there's my younger brother; he's bigger and better developed. You see, dad and we children held together, and that accounts for it.'
>
> 'But I don't see', I [London] objected. 'I should think, under such conditions, that the vitality should decrease and the younger children be born weaker and weaker.'

[110] Roberts, *The Classic Slum*, p. 79.

'Not when they hold together', he replied. 'Whenever you come along in the East End and see a child of from eight to twelve, good-sized, well-developed, and healthy-looking, just you ask and you will find that it is the youngest in the family, or at least is one of the younger. The way of it is this: the older children starve more than the younger ones. By the time the younger ones come along, the older ones are starting to work, and there is more money coming in, and more food to go around.'

He pulled down his sleeve, a concrete instance of where chronic semi-starvation kills not, but stunts.'[111]

This was also a remarkable example of the labourer's alternating periods of 'plenty and want', as depicted in Rowntree's investigation of poverty in York.[112] Indeed, working-class families, especially the poorest ones, would generally enter into a period of hardship with the birth of the first child which would start receding when the eldest child would start earning a wage.

In spite of its resilience, physicians appearing before the Inter-Departmental Committee on Physical Degeneration agreed that the most visible and severe forms of rachitic deformities were rapidly diminishing. For instance, an old head teacher from Leeds reported seeing up to 18 percent of visible rickets in the mid-1870s compared with no less than two percent in the early 1900s. Dr Thomas Young, President of the Association of Certifying Factory Surgeons with 25 years of experience in Liverpool,

[111] London, *The People of the Abyss*, pp. 154-5.
[112] Rowntree, *Poverty*, pp. 136-8.

was also of the opinion that cases of rickets were not as frequent as they used to be.[113] In this context, Dr Alfred Eichholz found that

> In the examination of school children for rickets it is necessary to distinguish between disabling or deforming rickets and rickets which, though present, may be non-disabling and practically of no effect as regards deformity, which may in fact be non-apparent to any but the expert eye. ... For instance, in the case of a poor school in Leeds Dr. Hall would correctly estimate the children showing signs of rickets at 50 per cent. Of these only about 2 or 3 per cent are apparent to the non-expert eye...[114]

In the same vein, Dr Alexander found in a public school of Glasgow, attended by working men's children that 1.16 percent suffered from the disease, arguing further that better nourishment as a result of cheaper food was the cause behind the drastic decline in the number of cases of visible rickets. Building on Thomson's findings in the early 1880s, Scott stated that 'there were hundreds of cases for every ten that there are now, and not only that, but the number of cases of flat feet that comes under my experience in the Royal Infirmary is not one-tenth of what it used to be.'[115] To be sure, rickets did not disappear and its victims were still far too numerous in the early 1910s. But compared to

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[113] IDCPD, Vol. 2, Q. 552 (cited by Eichholz), QQ. 2142-4 (Young).
[114] IDCPD, Vol. 2, Q. 451 (Eichholz). Eichholz is here referring to an open letter published by William Hall in May 1903 in the *Yorkshire Post* and in which he reported that in Leeds 30 out of 50 school children from a poor district and 10 out of 50 school children from the 'well-to-do' working-class suffered from rickets.
[115] IDCPD, Vol. 2, QQ. 1680-5, 1706-14, 1723 (Scott).

the condition of the working-class in the third quarter of the nineteenth-century, however, the progress was obvious, if only in the drastic decline of severe (i.e. visible) forms of rachitic deformities. It should be borne in mind that this 'progress' was in fact only a return to what could be called, for the lack of a better word, 'normal', levels of socially produced rickets like these being difficult to find in British history.

Although rickets was very much a class-based disorder, overwhelmingly affecting the poorest segments of the working population, it had a fundamental gender dimension. Although rickets is not a hereditary condition, Jenner had already insisted on the close relationship between the health of the mother and the development of rickets in the child. 'Of this much I am sure,' he said, 'that where the mother is in delicate health, in a state of which anaemia and general want of power form the prominent features without being of disease usually so called; there the children are often in a very decided degree rickety'.[116] Underfed, feeble, anaemic and thin women embodied more than their own inferior social, political and economic position within the gendered capitalist order, but also the organic generational context through which poverty was kept alive and passed on to the next, ill-formed generation. Moreover, the chronically deficient diet of poor girls would often follow them on their childbed as 'a large proportion of poor working-class women suffered from a malformed pelvis or bad curvature of the spine' likely to lead to miscarriage, childbearing difficulties or painful childbirth complications.[117]

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[116] Jenner, *Clinical Lectures*, p. 47.
[117] Drummond and Wilbraham, *The Englishman's Food*, p. 380; 'A Case of Brow Presentation in Rickety Pelvis', *The Lancet*, November 11 (1893), p. 1185.

Dr Archibald Kerr Chalmers, Medical Officer of the Local Government Board for Scotland, reported in 1904 that the operation of osteotomy, which consists in the surgical division of a bone to shorten, lengthen or alter its alignment, began in the 1870s as a result of the high incidence of rickets. 'Without any definite figures', Chalmers said, 'I may express the opinion that these operations are very much less frequent now. But, on the other hand, the number of operations for contracted pelvis in childbed have increased in recent years (we are going through that phase even now), so that we seem to be getting the same generation in the childbearing period, presenting in another form the results of rickets in childhood.'[118] Alexander Shaw had already noticed the frequency of distorted pelvis in females in 1832, stating that it was imperative that 'the accoucheur' be informed in order to be better prepared about 'the dangers in such cases'.[119] How many women have suffered or even died from difficult and excruciating painful labour because of a deformed pelvis is impossible to say. But the physical, psychological and emotional toll taken on poor girls, condemned to insufficient food of poor nutritional value, too often remained a deforming reality accompanying them into adulthood.

One important sign of rickets is the creation of dental deformities like dental caries, defects in the structure of the teeth and holes in the enamel. Tooth decay was a recurring theme in Victorian and Edwardian England and the source of a constant preoccupation by social reformers and medical and public authorities. Although bad teeth affected all social classes, as a rule, the poorer the neighbourhood the poorer were the teeth.

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[118] IDCPD, Vol. 2, Q. 5950 (Chalmers).

[119] Alexander Shaw, 'Of a Peculiarity in the Conformation of the Skeleton in Rickets', *Medico-Chirurgical Transactions*, Vol. 17 (1832), p. 470. See also: Alexander Shaw, 'On the Effects of Rickets upon the Growth of the Skull', *Medico-Chirurgical Transactions*, Vol. 26 (1843), pp. 340-1.

> The projectors of the Dental Hospital of London in 1859 declared that a quarter of the permanent teeth of the 'lower orders' aged between 6 and 15 were 'decayed'. In 1892 two dentists, Fisher and Cunningham, examined the teeth of 1,985 schoolchildren at Sutton in Surrey. They reported that only 527 had 'sound dentition'. The teeth of the poor, they explained, were 'commonly green ... standing in irritated and receding gums'.[120]

The Committee of the British Dental Association, appointed to investigate the condition of the teeth of school children of the poorer classes in England and Scotland, reported in 1904 that out of 10,517 mouths of boys and girls examined, 37,105 unsound teeth were discovered, about half of which were permanent teeth. Only 1,508 children (14.2 percent) had teeth considered free from decay. By the time those children reached adulthood, only 6.4 percent had sound teeth, 56.2 percent had five or more decayed teeth, and 23.6 percent had nine or more defective permanent teeth. That the recruiting statistics for the army show a progressive increase in the number of men rejected for loss or decay of teeth (from 10.88 per 1,000 in 1891 to 49.26 per 1,000 in 1902) reinforces the view that the imperial army was increasingly recruiting from the poorer, underfed and malnourished classes.[121]

Given that the proportion of disabling rickets was rapidly receding during the last quarter of the nineteenth century, the causes of bad teeth after 1880 were probably more

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[120] Barrymore Smith, *The People's Health*, p. 181.
[121] IDCPD, Vol. 3, Appendix 28, pp. 98-100.

complex than during the previous decades. For while it may have been responsible for most of the disorder during the 1850s, 1860s and 1870s, the widespread occurrence of bad teeth amongst all social classes thereafter suggests that rickets and undernourishment were not necessarily the best—or, at least, only—explanation for the high occurrence of tooth decay. As W. J. Moore has argued, dietary changes during the second half of the century may in fact better explain the resilience of dental caries, principally the growing consumption of carbohydrates like sugars and starches of very fine quality.[122] While poor children surviving on bread, margarine, jam, tea and bits of meat were likely to suffer extensively from such dietary changes, so were the children of better classes obtaining greater quantities of pastries, sweetmeats and other goods with high levels of sugar and fine flour.

But hunger is not reducible to the physical and psychological deterioration of the individual. It is also a social and generational plague that will be felt by families and communities for decades to come, and its effects are irreversible when it occurs in the first two years of life, causing cognitive impairments, poor health and lower educational achievements. The findings of Henry Ashby are, in this respect, very interesting. As a physician interested in the condition of the children in Manchester for 25 years, Ashby adamantly maintained that rickets was indeed receding, though no less than 1,440 infants and young children suffering either from the early stages of rickets or from various deformities were admitted to the Manchester Children's Hospital in 1903. Upon the examination of 750 school children selected for their learning difficulties, Ashby found

[122] W. J. Moore, 'Dental caries in Britain from Roman times to the nineteenth century', in *Food, Diet and Economic Change Past and Present*, ed. Catherine Geissler and Derek J. Oddy (London, 1993), pp. 50-61.

that 18 suffered from visible rachitic deformities, such as low stature, knock-knees and flat feet. Speaking of the group as a whole, he said:

> They were not only backward but had dull brains. Many of the others were of poor physique, with curved or limp spines and flat feet, due to rickets. These have not been selected at all for rickets; they were selected because they were backward. I do not mean that because a child has rickets it is dull and backward, but in the worst cases it often happens that it is. ... I do not wish to say that there were only eighteen of these suffering from rickets, because I could see traces of rickets in a large number of them, but these were *bonâ fide* dwarfs.[123]

While this reinforces the importance of the distinction between visible and more subtle forms of rickets, it is obvious that insufficient food was an important factor in why these children had learning difficulties. Examined before the Committee on defective and epileptic children in 1898, Frank Drew Harris, Assistant Medical Officer under the School Board for London, argued that low nutrition was 'the commonest cause' of 'mental feebleness' amongst children.[124] Insufficient food has acute impacts on the cognitive development and functions of children.[125]

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[123] IDCPD, Vol. 2, QQ. 8772, 8774-5 (Ashby). See also: Jenner, *Clinical Lectures*, pp. 7, 42.
[124] 'Report of the departmental committee on defective and epileptic children (Education Department)', Vol. 2, *PP* XXVI.49 (1898), Q. 1016 (Harris). See also: Q. 4565 (Rose); Q. 6533 (Price).
[125] Donald T. Simeon and Sally Grantham-McGregor, 'Effects of missing breakfast on the cognitive functions of school children of differing nutritional status', *The American Journal of Clinical Nutrition*, Vol. 49 (1989), pp. 646-53; Ann-Marie K. Chandler et al., 'School Breakfast Improves Verbal Fluency in Undernourished Jamaican Children', *The Journal of Nutrition*, Vol. 125, No. 4 (1995), pp. 894-900; Kavindra Kumar Kesari, Ruchika Handa and Ranu Prasad, 'Effect of Undernutrition of Cognitive

Conclusion

The growing availability of cheap food played an important role in diminishing the acute contradiction of capital accumulation. First and foremost, cheaper food meant a quantitatively greater intake of it, as well as a more varied diet combining the benefits of diverse food such as meat, fruit and vegetables, fish, bread, eggs, milk, and cheese. This was shown in the constitution of healthier bodies more resistant to diseases and disorders. Yet, as we saw, things were far from perfect, and the number of people living precarious lives remained extremely high.

The inability of capital to resolve these fundamental contradictions was tacitly recognised by the Inter-Departmental Committee on Physical Deterioration of 1904, which can be seen as the stepping-stone to a more interventionist state. The provision for free school meals following the Education Act of 1906 (made compulsory in 1914), the introduction of pensions for those over 70 in 1908 and the National Insurance Act of 1911 that gave workers the right to sick pay and established compulsory health insurance, were landmark liberal welfare reforms. Albeit limited in scope, there reforms nonetheless constituted the basis of the modern welfare state. In so doing, the state was increasingly playing the role that women's bodies had been playing for decades by mediating capital's contradiction between production and reproduction. And while there can be no doubt that living standards increased for the majority of the working class after 1870, there still

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Development of Children', *International Journal of Food, Nutrition and Public Health*, Vol. 3, No. 2 (2010), pp. 133-48.

remained an unacceptably high proportion of people living in abject poverty and for which chronic hunger and even starvation remained their lot.

As we shall see in the second part of this dissertation, the restructuring of the food system on the basis of cheap food was achieved both through the reorganisation of food relations and the consolidation and concentration of capital in retailing sectors and food industries, including the development of more efficient built environments for the distribution and circulation of food commodities, as well as highly exploitative labour relations around food distribution. But before we look into this in greater detail, we need to problematise more carefully our approach to food. For in describing the changes in the quantity and variety of food obtained, we have so far assumed its unchanging quality. Any assessments of what chronic poverty and rising standards of living truly meant for the people experiencing them necessarily remains incomplete as long as the fetishism surrounding food goods remains at a purely quantitative level. It is to this matter that we now turn.

2. The Changing Quality of Food

> It is clear that in taking food ... the human being produces his own body.[1]

In the last chapter we saw the vital role that the cheapening of food played in rising real wages. For over 25 years after the repeal of the Corn Laws imports of food barely kept pace with the growing demand associated with population growth and a now mostly urban population dependent on the market for survival. Poverty was rampant, and an underfed population continued to experience high rates of mortality and low resistance to diseases. Yet, the situation was beginning to change dramatically by the early 1870s. New transport technologies enabled an epoch-making space-time compression and thoroughly reworked the whole geography of food production. With such technological developments not only came the increased capacity to move growing quantities of foodstuffs from far afield, but also the ability to access a whole new variety of products. Moreover, the compression of space by time operated by steam boats entirely reworked the seasonality of food, extending to the international level what the railway had already accomplished at the regional level. Arguably, higher living standards were nowhere better illustrated than in improvements in the quantity and variety of foods available to average folks, as well as in advances in general health, as demonstrated by lower rates of mortality and higher resistance to diseases.

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[1] Karl Marx, *Grundrisse* (London, 1993[1857-8]) p. 90.

In spite of its historiographical importance, however, the living standard debate about the impacts of the Industrial Revolution has been overly quantitative in nature, which is curious given the appalling quality of food during the first half of the nineteenth century.[2] The same economistic approach to food as exchange-value rather than use-value informs real wage figures for the period 1850-1914, and historians of this period have also, curiously, tended to take the quality of food for granted.[3] While these different bodies of work provide important tools to chart the quantity and variety of food consumed by working populations during the period under review, the emphasis on prices of food commodities has tended to obscure the importance of changing food quality in the evaluation of people's health and living standards. This chapter documents the extent to which the assessment of people's health and well-being must ultimately take into consideration the dramatic change in the overall quality and properties of food over the period under review.

Drawing on evidence that food was unevenly distributed across gender, generational, and class lines, this chapter not only breaks away from rigid and fixed conceptions of food as abstract exchange-value, but also offers a more nuanced social history of changing food consumption and its impacts on livelihoods that complicates both ideas of progress and improvement. In this respect, this chapter argues that there is a

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[2] Fredrick Accum, *A Treatise on Adulterations of Food, and Culinary Poisons* (London, 1820); Burnett, *Plenty & Want*, pp. 99-120; Burnett, *Liquid Pleasures*.

[3] Floud, Wachter and Gregory, *Height, health and history*; George H. Wood, 'Real wages and the standard of comfort since 1850', *Journal of the Royal Statistical Society*, Vol. 73 (1909), pp. 91-103; Arthur L. Bowley, *Wages and income in the United Kingdom since 1860* (Cambridge, 1937); Ian Gazeley, 'The Cost of Living for Urban Workers in Late Victorian and Edwardian Britain', *The Economic History Review*, Vol. 42, No. 2 (1989), pp. 207-221; Charles Feinstein, 'New Estimates of Average Earnings in the United Kingdom, 1880-1913', *The Economic History Review*, Vol. 43, No. 4 (1990), pp. 595-632.

need to understand the quality of food as itself dynamic and socially mediated, and therefore to understand how 'cheap food' is itself a historically changing social category whose impact on livelihoods is deeply mediated by fundamental relations of lived reality such as class, gender and age. In what follows I explore the changing social meaning of 'cheap food' and its impact on livelihoods from two distinct, yet complementary ways.

First, I argue that there is a tendency in the literature about social and economic changes to *underestimate* trends in working class living standards, precisely because of the general tendency to reduce food to purely quantitative abstractions. Documenting the widespread adulteration of food and drink during the 1850s and 1860s and its subsequent decline, the first two sections demonstrate the fundamental societal shift from cheap food as a general fraud on people's health and pocketbook to cheap food as 'pure' food. In other words, rising real wages during the last quarter of the nineteenth century were not simply correlated with the money-wage's ability to command a greater quantity of food goods, but also with their ability to get the full nutritional benefits over purchased food articles. Second, as I argue in the third section, there is also a tendency in the literature to *overestimate* working class living standards. In this respect, the changing properties of foodstuffs and the manufacturing of cheap new products with low nutritional value were translated in a net decline in living standards for an important part of the working class. Both claims alter the bourgeois periodisation of social betterment in important ways.

'Their stomachs are the waste-baskets of the State'

Although some scholars have distinguished between those adulterations that were mere fraud to the pocketbook and those that constituted serious hazards to health, food adulteration generally involves altering food by: (1) adding weight and bulk; (2) enhancing colour; and (3) improving smell, flavour and pungency.[4] Charles Knight was right to refer to these 'nefarious practices' as both immoral and injurious to health.[5] In fact, never was adulteration more widespread than during the middle decades of the nineteenth century, as the opportunities for systematic, organised commercial fraud came to exist on an unprecedented scale. Finding pure or unadulterated food in 1850 had become virtually impossible. The extent of the fraud had already been revealed in 1820 with the publication of Fredrick Accum's *A Treatise on Adulterations of Food, and Culinary Poisons*. While the book enjoyed tremendous success amongst literate classes, it hardly reached the working-class, who were the most deeply affected by this scourge. Adulteration increased dramatically over the decades following Accum's treatise, whose detailed documentation of different methods arguably reinforced—rather than eradicated—the fraudulent art. For instance, adding alum to flour, water to beer, formaldehyde to milk or various dyes to tea was especially common.

The scale of the fraud was such that generations of people developed new adulterated tastes, culinary preferences, and dietary habits, normalising and stabilising a

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[4] Accum, *A Treatise on Adulterations of Food*, pp. 3-4; John Mitchell, *Treatise of the Falsifications of Food, and the Chemical Means Employed to Detect them* (London, 1848), p. viii; Arthur Hill Hassall, *Food and its Adulterations* (London, 1855), p. iii; Wentworth Lascelles Scott, 'On food; its adulterations, and the methods of detecting them', *Journal of the Society of Arts*, Vol. 9, no. 428 (1861), p. 154; Peter J. Atkins, 'Sophistication Detected: Or, the Adulteration of the Milk Supply, 1850-1914', *Social History*, Vol. 16, no. 3 (1991), p. 318.

[5] Charles Knight, *Knight's Cyclopaedia of the Industry of All Nations* (London, 1851), p. 24.

whole new set of cultural references that later proved to be powerful barriers to the battle for pure food. Manby Smith had already noted in the early 1850s how 'the public palate is almost universally vitiated, and pretty generally revolt against the taste of unadulterated malt liquor.'[6] George J. Holyoake, a devoted promoter and historian of the Co-operative movement, concurred with Manby Smith:

> When you have saved a little money, and got a little [Co-operative retail] store, and have reached the point of getting pure provision, which will not be reached very soon, you will find your purchasers will not like them, now know them when they taste them. Their taste will be required to be educated. They have never eaten the pure food of gentlemen, and will not know the taste of it when you bring it to their lips.[7]

Co-operative's struggle against the evil of adulteration was further supported by the publication of John Mitchell's *A Treatise on the Falsifications of Food* in 1848, which documented the now terrifying proportions of adulterated food. In spite of its importance, however, adulteration had gained comparatively very little traction upon Victorian minds.

Things started changing with Dr Arthur Hill Hassall. Chief analyst of the Analytical Sanitary Commission of the *Lancet* from 1851 to 1854, Hassall made extensive use of the microscope alongside chemical analysis, and published the result of his analyses with the

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[6] Charles Manby Smith, *Curiosities of London Life: Or, Phases, Physiological and Social, of the Great Metropolis* (London, 1857[1853]), p. 168.
[7] George Jacob Holyoake, *The History of Co-operation in England: Its Literature and its Advocates*, Vol. 2, The Constructive Period—1845 to 1878 (London, 1885), p. 26.

names and addresses of shopkeepers practicing culinary sophistry.[8] *The Dublin Review* captured the extent of the ruling class's disinterest for the question when it remarked that Hassall's investigations revealed 'an amount of adulteration which certainly no person was prepared for'.[9] While there was always a handful of social reformers awaken to the social plague of adulteration, including the Co-operative movement, its sheer ubiquity in the 1850s was in and of itself a strong testimony of the blind faith in *laissez-faire* precepts. The widespread fraud practiced by an otherwise 'respectable' class of tradesmen made the deferential kneeling of the capitalist class before the self-regulating market rather suspicious, and the emptiness of the ceremonial itself was exposed by the Select Committee on Adulteration of Food of 1856, reluctantly appointed by the government after the devastating revelations of the *Lancet*.

The first witness examined before the Committee gave the tone to what quickly became an implicit critique of the state's inaction and unwillingness to intervene into the private sanctity of the relationship between buyers and sellers. Indeed, Alfred Swaine Taylor, professor of medical jurisprudence and chemistry in Guy's Hospital for 24 years, gave evidence that confectionery were loaded with poisonous colouring, such as Scheele's green, which contains both copper and arsenic, vermillion and red lead, further noting that such substances were 'still used to some considerable extent'.[10] Witness after witness revealed the widespread adulteration of food and drink, and in their report the commissioners were forced to recognise 'that adulteration widely prevails'. Perhaps more

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[8] The results of his analyses were later collected in *Food and its Adulterations* (1855), a revised and extended study including the reports of the Commission.
[9] 'Food and its Adulterations', *The Dublin Review*, Vol. 39, No. 77 (1855), p. 63.
[10] 'Report from the Select Committee on Adulteration of Food, &c.' [hereafter RSCA1856], *PP* VIII (1856), QQ. 1-8 (Taylor).

interesting, however, was the moral anxiety expressed over bourgeois ideals of progress: 'Not only is the public health thus exposed to danger, and pecuniary fraud committed on the whole community, but the public morality is tainted, and the high commercial character of this country seriously lowered both at home and in the eyes of foreign countries.'[11]

Because analysts of real wage data have largely overlooked these trends, and taken food commodities as qualitatively static and unchanging, they have failed to make sense of the profound improvement in the nutritional and economic value of food between 1850 and 1914. On that basis, it then becomes possible to suggest that real wage calculations have in fact tended to underestimate the extent to which living standards rose from the 1870s on. Correcting this oversight, this section documents the most common forms of food adulteration, and the ways that these impacted working-class health and well-being.[12]

Most importantly, bread was often made from wheat damaged by weevil or other insects, as well as from spoiled or 'sour' flour, rancid due to the decay of wheat germs. Other cereal grains like barley and bran, grounded beans and peas and potato were also added, either in the form of flour or sieved into the dough after they had been boiled. Such additions lowered both the costs of production and the nutritional value of bread. Carbonate of magnesium and ammonia were used to produce a light loaf from spoiled

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[11] RSCA1856, p. iii.

[12] Except otherwise stated, I draw on Accum; Peter J. Atkins, 'Sophistication Detected'; Atkins, 'White Poison? The Social Consequences of Milk Consumption, 1850-1930', *Social History of Medicine*, Vol. 5, no. 2 (1992), pp. 207-227; Burnett, *Plenty & Want*, 99-120, 240-67; Drummond and Wilbraham 288-312; Hassall; 'Report from the Select Committee on Adulteration of Food, &c.; 'Report from the Select Committee on Adulteration of Food Act (1872)', *PP* VI (1874); Mayhew, *London labour*; Mitchell, *Treatise of the Falsifications of Food*; Barrymore Smith, *The People's Health*, pp. 203-15.

flour, and other impurities like chalk, powdered flints, plaster, sand, sugar of lead, bone dust, pipeclay, sawdust, soap, gypsum, ground stone, pearl-ash and powdered bones would find their way in. As the colour of all these different substances suggests, most adulterations sought to take advantage of people's 'rage for white bread'.[13] Under the age-old technique of stone-grinding, wheat germs had previously been crushed and ground up in the process of making bread, thus giving it a yellowish grey hue. But during the eighteenth century a cultural prejudice against this kind of bread developed, as the light and porous texture of the white bread eaten by the more affluent classes was increasingly considered more palatable and desirable. Working class consumption of genuine white bread, however, was curtailed by its price, as more labour was required in the production of fine, white flour.

The addition of alum to flour in order to improve its colour was by far the most common means of achieving a whiter bread through adulteration, and there was indeed a whole branch of business for the wholesaler of decayed and spoiled grades of flour that could be 'recovered' by the addition of alum and then sold as superior. One would have been hard pressed to find in London in the 1850s and 1860s a loaf of bread that did not contain alum, even though contemporary social commentators, as the 1856 Report from the Select Committee on food adulteration had demonstrated, were well aware of its injurious effects on people's health. Manby Smith had already argued in the early 1850s that the excessive use of alum in the London bread caused about 10,000 indigestions a

[13] Isabella Beeton, *The Book of Household Management* (London, 1861), p. 831. See also: George Dodd, *The food of London: A sketch of the chief varieties, sources of supply, probable quantities, modes of arrival, processes of manufacture, suspected adulteration, and machinery of distribution of the food for a community of two millions and a half* (London, 1856), pp. 167, 204.

week, further noting that 'if London bread were nothing but bread, the London mortality-bills would decrease a remarkable percentage.'[14] Apart from its harmful effects, alum, like potato or rice, also had the advantage to retain a greater amount of water. Undercooked bread with a higher rate of moisture could cover up for shorter weight, while benefitting the baker who produced a few extra loafs per sack of flour.[15] In addition, the use of potatoes or water from potato boiling accelerated the growth of yeasts to produce ill-raised, undercooked bread which tended to be both sour and bad for the stomach and digestive system, a sure culprit with alum of people's frequent complaints about stomach aches and indigestion.

Butter, another household staple, was altered in similar ways. The addition of arrowroot, farina, potato starch, carbonates of potash, and soda to butter all sought to incorporate as much water as it could possibly hold. Salted butter invariably contained between eight and 33 percent water, and even the well respected Devon and Dorset butters contained great quantities of it.[16] The use of sour cream in the fabrication of butter also tended to foster the development of fungi and bacteria, and it was not an uncommon practice to 'reconstitute' inferior or rancid butter by washing it to remove the salt, acids and unpleasant odour. Some producers washed it again with milk and a small quantity of sugar before selling it at substantial profits as 'Epping butter'. Hogs' lard and other animal fats were frequently added to butter of inferior quality, and John Postgate revealed

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[14] Manby Smith, *The Little World of London*, p. 299. See also: Scott, 'On food', p. 154.
[15] Hugh Seymour Tremenheere, 'Report addressed to Her Majesty's Principal Secretary of State for the Home Department, relative to the grievances complained of by the journeymen bakers' [hereafter RGCJB], *PP* XLVII (1862), §786 (Rice); §32 (Bennett); §430, 443 (Dwarber); §470 (Bremner); §611-2 (Miller); §774-7 (Weston).
[16] 'Butter Analysis', *PP* LIX (1876), pp. 1-6.

in 1857 that less than half of the weight of the 'butter' sold in Liverpool to the poor would have qualified as such.[17] Ten percent of the butter examined in 1877-78 contained an admixture consisting of foreign fats and colouring matter, and analyses of samples taken from North Derbyshire revealed that this 'fictitious butter' was produced on a large scale and often sold as genuine butter.[18] And while margarine was later to become the main source of foreign fats added to butter,[19] the practice of selling margarine under the guise of butter continued through the end of our period.[20]

Meat was, in the middle decades of the nineteenth century, one of the most unwholesome articles of consumption.[21] It was generally of low quality and the sale of tainted and diseased meat was common in the poorer neighbourhoods of the manufacturing districts. Dr Yeld, Medical Officer of Health for Sunderland, made a report to the Health Committee regarding the practices of 'blowing' and 'stuffing' meat. While the latter consisted in 'artificially stuffing the loins or other parts of the animal with fat, so as to give a false appearance of corpulence', the former was achieved by the introduction of

> A tube or pipe under the skin of the meat, and the butcher or dresser then blows the foul air from his own lungs into the cellular tissue of the meat, the effect being that

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[17] Postgate, cited in Scott, 'On food', p. 159.
[18] 'Seventh Annual Report of the Local Government Board' [hereafter ARLGB], *PP* XXXVII, Part I (1878), p. xcv.
[19] 'Thirty-Fourth ARLGB', *PP* XXXI, Part I (1905), p. clxxvii.
[20] 'Thirty-Seventh ARLGB', *PP* XXX, Part I (1908), p. cii.
[21] For an excellent survey of the problem, see: Richard Perren, *The Meat Trade in Britain 1840-1914* (London, 1978), Chap. 4.

> a deceptive appearance of plumpness or fatness is given to the meat, and in many cases it becomes tainted with the smell of rum, tobacco, &e.[22]

In Glasgow, some butchers covered the legs or joints of lamb and veal with tallow to add to its weight.[23] While bacon became cheaper when it started to smell and its fat was turning yellow, anthrax-tainted bacon with black spots was even cheaper.[24] Meat of very low quality was generally sold on Saturday night, as many then bought the meat for Sunday's dinner. E. Headlam Greenhow noted that it was the habit 'of many respectable tradesmen, both at Newgate and Whitechapel Markets, to let their rails on Saturday, when their own business is over for the day, to an inferior class of dealers, who sell diseased or poor meat to the humbler classes.'[25] Thus, these vendors retained the class distinction of 'respectability', while diminishing the loss associated with their overstock.

In 1861 Scott estimated that about 10 percent of the meat disposed in the London markets was unfit for human consumption.[26] The scale of the trade in cheap offal and old and diseased meat was the subject of an extensive survey two years later by John Gamgee. The latter not only confirmed the problem, but also revealed the extent of the trade to be far greater than previously thought. Indeed, Gamgee reported to the Privy Council that one-fifth of the meat sold in the United Kingdom (beef, veal, mutton, lamb,

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[22] 'Butcher's Meat in England', *The New York Times*, September 2, 1874.
[23] Schmiechen and Carls, *The British Market Hall*, p. 9.
[24] Barrymore Smith, *People's Health*, p. 204.
[25] E. Headlam Greenhow, 'Report on Murrain in Horned Cattle, the Public Sale of Diseases Animals, and the Effects of the Consumption of their Flesh on Human Health', *PP* XX (1857), p. 48.
[26] Scott, 'On food', p. 156. See 'A Cruel Joke', *Punch*, July 13 (1861), p. 11.

and pork) came from diseased cattle.[27] These animals generally suffered from three kinds of diseases: (1) contagious fevers like the pleuro-pneumonia, aphthous fever, foot and mouth disease, and the small-pox of sheep; (2) anthrax; and (3) parasitic diseases like rot, sturdy and scab in sheep, and measles in pigs. The existence of the cattle plague had already been identified in the vicinity of Manchester and its prevalence ascertained in Bedfordshire, Buckinghamshire, Shropshire, Cheshire, and other counties of England in 1857.[28] By 1863 pleuro-pneumonia annually destroyed upwards of 50 percent of the cows in London, Manchester, Birmingham, Liverpool, Glasgow, Edinburgh, and other large towns.[29] As a result 'a 'slink' trade in 'wasters' developed as a hidden circuit in the livestock economy of some regions.'[30] It was indeed a common practice for farmers to send diseased and suspect animals to the slaughterhouse and to bring the carcases of dead animals to the market.[31] As the cattle plague reached epidemic proportions in 1865-7, the amount of diseased meat on the market increased substantially.

The diseased meat trade was already in full swing by mid-century, 'disease [being] so prevalent that infected animals were sold as a matter of course for human food: if they were not then there would have been a measurable shortage of meat.'[32] This situation would only grow worse during the 1850s and 1860s, with stagnating levels of meat consumption taking place within the context of rapidly declining meat quality. In an

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[27] 'Fifth Report of the Medical Officer of the Privy Council', p. 22.
[28] Greenhow, 'Report on Murrain in Horned Cattle', p. 9.
[29] John Gamgee, 'Cattle Diseases in Relation to Supply of Meat and Milk', in *Fifth Report of the Medical Officer of the Privy Council*, Appendix IV, p. 275.
[30] Peter J. Atkins, 'Milk consumption and tuberculosis in Britain, 1850-1950', in *Order and Disorder: The Health Implications of Eating and Drinking in the Nineteenth and Twentieth Centuries*, ed. Alexander Fenton (East Linton, 2000), p. 85.
[31] Greenhow, 'Report on Murrain in Horned Cattle', pp. 7, 16.
[32] Perren, *The Meat Trade in Britain*, p. 52.

open letter to the Lord Provost of Edinburgh in 1857, John Gamgee gave evidence that a large trade in diseased meat was carried on in the city. The letter also contained in an Appendix a series of letters to the editors of the *Scotsman*, the *Glasgow Herald* and the *Aberdeen Herald* demonstrating that the roots of the trade in diseased meat were long, extending to Aberdeen and Glasgow as well.[33] In fact, as Perren has convincingly demonstrated, this peculiar trade was also well alive in almost all of the large towns in England, including Birmingham, Leeds, Liverpool, London and Manchester.[34]

In 1863 the town clerks of England reported on the amount of diseased or unsound meat seized by their officers for the years 1861 and 1862.[35] While Manchester reported 15,966 lbs, Salford 19,861 lbs, Sheffield 14,700 lbs, Cardiff 428 lbs, and Bristol about 3,000 lbs, the Officers of the Commissioners of Sewers of the City of London reported 254,919 lbs and Liverpool seized 255,629 lbs during the same period. That these figures vastly underestimate the extent of the scourge is not in dispute. Indeed, Dr Henry Letheby, Medical Officer of Health for the City of London, reporting to the Commission on the Origin and Nature of the Cattle plague in 1866, openly admitted that even though close to one million lbs of unwholesome meat had been seized at Newgate Market, Aldgate Market and Leadenhall Market between 1861 and 1865, 'it does not represent the actual amount which passes into the shops of the lower class of butchers; for not only

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[33] John Gamgee, *Diseased Meat sold in Edinburgh, and Meat Inspection, in Connection with the Public Health, and with the Interest of Agriculture* (Edinburgh, 1857).
[34] Perren, *The Meat Trade in Britain*, p. 53, 57-8, 62.
[35] 'Diseased and Unsound Meat', *PP* XLVIII (1863). See also: Hollingshead, *Ragged London*, p. 19.

does a good deal of meat escape the notice of the inspectors, but ... there is a regular trade in diseased meat immediately beyond the city.'[36]

Very few local governments had the legal capacity, institutional ability or political willingness to fight an otherwise national problem. At least until the late 1860s, the great majority of local inspectors were simply unqualified to perform their duty, their jobs not uncommonly 'regarded as sinecures for worn-out men'.[37] As for the state, paralysed as it was by its *laissez-faire* approach, it showed no small level of complacency in front of a remarkably well-organised and fraudulent food market. It was not until the 1870s, following greater imports of livestock, that the economic incentives behind the trade in diseased meat would finally start to recede significantly. Meanwhile, British consumers would be served very low quality meat, often putting their health, and sometimes life, in the balance. As always, riveted even more tightly to this institutionalised robbery were the poor, whose access to relatively cheap 'bloodless joints and flinders of meat' ultimately came at a heavy price. 'Murrain among sheep flocks and plague amongst cattle mean fat fields for the harvesting of this class of butcher; but, alas! it means no better than death in the pot to poor mother ... and her famished brood.'[38]

Moreover, the 1863 figures contrast quite dramatically with later data. For instance, at the height of public consciousness, reformist attitudes, co-operative sentiments, legal regulations, and the revolution in transport and preservation technologies, Manchester condemned and destroyed in 1908 no less than 241,157 lbs of

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[36] 'First report of the commissioners appointed to inquire into the origin and nature of the cattle plague', *PP* XXII.1 (1866), p. 173, Appendix 1, Table 5, p. 172. See also: 'Second report of the commissioners appointed to inquire into the origin and nature of the cattle plague', *PP* XXII.227 (1866), p. 73.
[37] Perren, *The Meat Trade in Britain*, p. 64.
[38] James Greenwood, *The Wilds of London* (London, 1874), p. 328.

bad meat and 247,751 lbs of fish, as well as great quantities of rabbit, game, poultry, fruit and vegetables, while London destroyed over 3 million lbs of unsound meat.[39] Moreover, the opinion expressed in 1857 by the inspector of meat and slaughterhouses for the City of London 'that much of the meat from animals that have had pulmonary disease is of first rate quality'[40] was anything but reassuring at a time during which bovine tuberculosis was thriving, and indeed cast serious doubts on the validity of the 1863 figures. Perhaps more troubling was the very large number of town clerks who did not report any seizures or reported only very low amounts. Furthermore, for the vast majority of shopkeepers, traders and wholesalers, the generally low level of fines – averaging £2-3, with many cases at 25*s.* – may have in fact been seen as anything but a small tax on an otherwise profitable trade.

Although the general quality of meat improved drastically during the last quarter of the nineteenth century, it was still possible to find disturbingly low levels of quality at the beginning of the twentieth century, especially in poorer districts like the slum of Salford:

> with the first warm weather he [the shopkeeper] needed to be constantly on the alert for meats and cheese going 'off'. In the absence of a refrigerator or even an ice box, bacon and raw ham (easily the most popular of the meats) arriving none too fresh from the wholesaler could be alive with maggots in a few hours. Washing with

[39] 'Unwholesome Food in Manchester', *The British Medical Journal*, Vol. 1, No. 2463, March 14 (1908), p. 652; Critchell and Raymond, *A History of the Frozen Meat Trade*, p. 193.
[40] Greenhow, 'Report on Murrain in Horned Cattle', p. 44.

> charcoal water would stave off putrefaction for a time, but in the end only the cutting away of affected parts, with a considerable dent in profits, gave rather more permanent relief. Many shopkeepers washed and then sold these trimmings...[41]

Butchers were also struggling, and though the practice of lending their rails to a lower class of dealers on Saturday night continued, many, under the increased sanitary surveillance at the public market, now had to boil down their bad meat.

As Francis Barrymore Smith has argued, the crucial point was 'not *how much* meat the lower classes got (the old issue between the 'standard of living' debaters), but its quality.'[42] While the issue of the quantity of meat obtained cannot be dismissed, Barrymore Smith's emphasis on the poor quality of meat is an important reminder that too quantitative an approach to the debate over 'living standards' runs the risk of masking the changing quality of food during the Victorian and Edwardian eras. James Greenwood, member of the Food Committee of the Society of Arts, visited the unauthorised Whitecross-street market on a Saturday night in 1867. 'I found', he said, 'meat on the night in question remarkably cheap, but of decidedly inferior quality. It is astonishing to me how it passes the inspectors: and the same remark applies, to a great extent, to the meat exposed in Newgate and other markets. ... There were tons of meat that evening in Whitecross-street which almost made one shudder to contemplate.'[43] That same year Dr Letheby reported that 129 tons (or 288,960 lbs) of meat were seized and condemned in

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[41] Roberts, *The Classic Slum*, p. 113.
[42] Barrymore Smith, *People's Health*, p. 203.
[43] James Greenwood, 'Food Committee', *Journal of the Society of Arts*, Vol. 16 (1868), p. 92.

London, only slightly more than in the early 1860s, thus suggesting the continuous ineffectiveness of inspection. As he further explains:

> a great deal of unsound meat escapes the notice of the inspectors. If fact, if it were not for the assistance afforded to them by the salesman of the markets, it would be absolutely impossible to check, to any large extent, the sale of unwholesome meat; for, in the three markets of the city—Newgate, Aldgate, and Leadenhall, as much as 400 tons of meat are sold daily. ... Of this, a large quantity is diseased, and it comes chiefly from our own country towns, where it is a common practice to forward to London everything that is unsaleable at home.[44]

As many other social commentators of the time, Letheby was all too aware that only a fraction of the diseased and putrefied meat was actually seized.

Of course, people were not dumb enough to consciously eat unwholesome and unsuitable food. It is indeed the very essence of adulteration to trick people's senses in order to cheat their wallets (and health). For it was precisely the mastered art of the 'professor of magic-multiplication' rather than to double any quantities or volumes 'without condescending to have recourse to a vulgar arithmetical process'.[45] As Marx put it, 'this kind of 'sophistry' understands better than Protagoras how to make white black, and black white, and better than the Eleatics how to demonstrate before your very eyes

[44] Henry Letheby, 'On Food', *Journal of the Society of Arts*, Vol. 16 (1868), p. 756.
[45] Manby Smith, *Curiosities of London Life*, p. 164.

that everything real is merely apparent.'[46] For instance, heavily seasoned pie would mask even the taste of the lowest quality of meat. As Mayhew noted:

> The pie-dealers usually make the pies themselves. The meat is bought in "pieces," of the same part as the sausage-makers purchase—the "stickings"—at about 3*d.* the pound. "People, when I go into houses," said one man, "often begin crying , 'Mee-yow,' or 'Bow-wow-wow!' at me; but there's nothing of that kind now. Meat, you see, is so cheap." ... The pies in Tottenham-court-road are very highly seasoned. "I bought one there the other day, and it nearly took the skin off my mouth; it was full of pepper," said a street-pieman, with considerable bitterness, to me. The reason why so large a quantity of pepper is put in is, because persons can't exactly tell the flavour of the meat with it.[47]

No wonder that meat was cheap. While the selling of 'meat derived from animals that have taken medicine in sufficient quantity to impregnate the flesh with its odour' was a common practice,[48] diseased organs and putrid, tainted and otherwise unsalable meat furnished cheap inputs to sausage-makers who used pyroligneous acid ('wood vinegar') to remove the smell.[49] Sausage makers, soup-shop proprietors, meat pie shops, and the manufacturers of polonies were all undersellers owing their low prices to inferior,

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[46] Marx, *Capital*, Vol. 1, p. 358.
[47] Mayhew, *London Labour*, p. 196. See also: Greenwood, 'Food Committee', p. 124.
[48] Greenhow, 'Report on Murrain in Horned Cattle', p. 49.
[49] Greenhow, 'Report on Murrain in Horned Cattle', p. 48; 'Fifth Report of the Medical Officer of the Privy Council', *PP* XXV (1863), p. 23.

diseased and, sometimes, rotten meat.[50] Arsenical solutions would also be employed for diseased meat or in a state of decomposition.[51]

Like meat, fish was often adulterated to deceive the olfactory and visual perceptions of the customer. The heavy addition of Armenian bole in anchovy paste is one example of the liberal use of colouring, and sea fish like cod, haddock, and whiting were often "blown" to make them appear large and plump. Major technological advances in the production, distribution and preservation of food had yet to come, and the quality of fish generally remained doubtful in a trade containing its fair share of undersellers. Stinky fish, by no means an uncommon phenomenon, were fried in order to prolong their life or cheaply 'recover' spoiled overstocks. Appearing before the Food Committee of the Society of Arts in January 1868, Mr Charles reported that a lot of old, stinky fish such as herring and haddock were cured in order to 'recover' them, which, he further noted, 'would not be tolerated by people who "palate" their food; but they are acceptable at the cheap prices at which they are sometimes sold to the hungry poor.'[52]

Others would purchase cheap, stale fish from the market and rub the gills either with blood obtained from the slaughterhouse or with vermilion purchased at a druggist's shop in order to give the fish a false appearance of freshness.[53] Fried fish, which was fast rising as a national favourite, often hid unsavoury 'secrets' to its customers.

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[50] Gamgee, 'Cattle Diseases in Relation to Supply of Meat and Milk', pp. 284-5; 'Unwholesome Sausages', *The British Medical Journal*, May 13 (1882), p. 710.
[51] Scott, 'On food', p. 156.
[52] Mr Charles, 'Food Committee', *Journal of the Society of Arts*, Vol. 16 (1868), p. 157.
[53] Felix Folio, *The Hawkers and Street Dealers of the North of England Manufacturing Districts* (Manchester, 1859), p. 33.

> This supply is known in the trade as "friers," and consists of the overplus of a fishmonger's stock, of what he has not sold overnight, and does not care to offer for sale on the following morning, and therefore vends it to the costermongers, whose customers are chiefly among the poor. The friers are sometimes half, and sometimes more than half, of the wholesale price in Billingsgate. Many of the friers are good, but some, I [Mayhew] was told, "in any thing like muggy or close weather were very queer fish, very queer indeed," and they are consequently fried with a most liberal allowance of oil, "which will conceal anything."[54]

Street dealers particularly appreciated gin-drinking neighbourhoods and public-houses of populous districts, for, as one of them put it, 'people hasn't their smell so correct there.' Some even accused friers of using lamp oil when cheaper. In Southwark, young costermonger James Crawley was charged by the Inspector of Nuisances of St. George's for washing filthy fish in the public drinking fountain attached to the church wall in High-street. Sign of the time, Crawley was discharged because no bylaw protected the public fountains from such nuisances. That the fish were filthy did not seem to matter much.[55]

Drinks were hardly better off than food. Virtually impossible to obtain in pure form, coffee almost always contained large proportions of chicory, roasted corn, grounded peas and beans, potato flour and colourings such as red ochre. In many samples, coffee itself was absent. Cocoa was commonly adulterated with starches and

[54] Mayhew, *London Labour*, p. 166.
[55] *Times*, July 4 (1860), p. 12.

sugar, which constituted up to three-fourths of the bulk of manufactured cocoa. In 1850, large quantities of tea were manufactured by mixing genuine tea with hedgerows, shrubs, plants, and ash, sloe and elder leaves. The leaves were boiled together, often with verdigris, baked on iron plates or dried on sheets of copper, and then rubbed by hand to produce curls that imitated genuine tea. Depending on whether the admixture was destined to fabricate 'black' or 'green' tea, colouring matter was added to glaze the leaves: plumbago, black lead, Prussian blue, turmeric powder, ferrocyanide, China clay and Dutch pink, and the poisonous verdigris, copper carbonate, and lead chromate. The trade also 'recycled' exhausted leaves, and at least eight factories in London existed in the 1840s expressly for the purpose of drying used tea-leaves and re-selling them to fraudulent dealers.

Watering down beer was another common practice and a whole series of adulterations were necessary in order to 'recover' its original taste, strength, and flavour. Ginger root, alum, coriander seed, and orange peels were used as flavouring substances, and *capsicum* or guinea pepper, and grains of paradise gave weak ales and ambers a pungent taste. Copperas, mixed drugs, and even hartshorn shavings were added, and brewers came to substitute *calamus aromaticus*, multum, and wormwood to hops in order to make the beer bitter for a fraction of the price. The substitution of pale to brown malt in the making of porters forced brewers to 'recover' the colour and flavour of their paler beer by adding boiled brown sugar, molasses and extract of gentian root. The loss of the white frothing in the process of dilution was recovered through the addition of green vitriol (sulphate of iron) in a process called 'heading'. Freshly brewed beer could be

'brought forward' and thereby transformed into an old beer by adding sulphuric acid to 'harden' it. Inversely, the addition of oyster shells, carbonate of potash, chalk or soda to sour or stale beer could recover it by neutralising excessive acid. The most dangerous and deadly adulteration, however, was the addition of *cocculus indicus*, a poisonous berry that not only acted as a cheap substitute for malt and hops and as a preservative against second fermentation, but also increased the intoxicating quality of the beer. Other substances like opium, tobacco, nux vomica and poppy extract were also used for their inebriating qualities. As Barrymore Smith noted: 'Workmen liked adulterated beer. Pure beer, they said, just went down and they 'felt nothing of it'. Yet adulteration with these hallucinogens doubtless explains some at least of the bizarre degradation, brutality and murder that pervaded Victorian lower-class life.'[56]

Such were the most frequent adulterations on the market. Other forms of adulteration included sugar containing disturbing amounts of the 'sugar insect' (*acarus sacchari*), chalk, plaster of Paris, starch or flour, pipeclay, sawdust, and grit; sugar confectionery made from poisonous colouring matters such as chrome yellow and red and white lead; poisonous pickles owing their green colour to copper; the rind of Gloucester cheese coloured with vermilion and red lead; and pepper adulterated with dust and sweepings of the warehouse floors. Oranges were either boiled and polished to give them a false 'luscious appearance' or had their juice pricked out. Old figs were brushed up and sold as new, and bad, dried up cocoa nuts were made heavy again by the addition of

[56] Smith, *People's Health*, p. 211.

water to them after boring a hole and stopping it with a blackened piece of cork.[57] Scott recalls buying 'a sample of mustard so largely adulterated with *fresh* plaster of Paris, that when mixed with water it "set" into a solid cake in the course of a few minutes.'[58] Milk remained problematic throughout the period under review, as we shall see in Chapter 7.

To eat in the middle decades of the nineteenth century was a dangerous practice. 'One patient', noted surgeon R. Bowie in the late 1840s, 'died who had been drinking punch the day before. Three deaths, although not in my practice, took place from eating pickled salmon, and one from eating dough pudding. Several cases occurred too from taking Epson salts.'[59] Similarly, Taylor reported before the 1856 Select Committee the case of two children who died in 1853 from eating poisonous confectionery, as well as the case of 14 children suffering from arsenic poisoning.[60] Letheby reported in the 1860s that 64 out of 66 persons known to have eaten diseased sausage meat 'were attacked with sickness, diarrhoea, and great prostration of vital powers', with one of them dying. Letheby also reports the case of Professor Brown who, in 1863, applied to a large butcher to obtain animals for dissection and from whom 'he [Brown] received back five or six animals, which, though in a bad state of rot, were dressed for the market... What becomes, he says, of the hundreds and thousands of rotten ship which we see in the fields? To bury them would require whole catacombs; the real catacombs are the intestinal canals of the human body.'[61] Obviously, that was only the tip of the iceberg, the large majority of cases remained outside the purview of medical authorities. Symptoms

[57] Mayhew, *London Labour*, p. 530; Folio, *The Hawkers and Street Dealers*, pp. 33, 127-8.
[58] Scott, 'Of food', p. 157.
[59] 'First Report of the Metropolitan Sanitary Commission', p. 3 (Bowie).
[60] RSCA1856, Q. 4 (Taylor).
[61] Letheby, 'On Food', pp. 757, 758-9.

of severe peritonitis, vomiting, enteritis, gastroenteritis, stomach ache, diarrhoea, and violent delirium were not uncommon in the middle decades of the nineteenth century, and poisonous food often led to collapse, coma, and even death.[62]

Cheap food and the decline of adulteration

For those following the development of Hassall's investigations and interested in what the witnesses examined before the 1856 Select Committee had to say, revelations about the level of adulteration were appalling. By 1860 Hassall himself referred to this scourge as an invisible 'ugly little monster' that in fact was 'almost ubiquitous.' This 'Evil One', he further commented, was indeed a 'strange, disgusting, and poisonous demon' that 'not only lowers the money value of an article, but it lessens its dietetical qualities, and in many cases it renders it positively unwholesome; as when injurious substances are introduced.'[63] These findings were further corroborated by Scott in 1861, who's analyses revealed that 87 percent of bread, 95 percent of brown sugar, 77 percent of salt butter, 92 percent of coffee, 78 percent of green tea, 74 percent of milk, and 100 percent of mustard were adulterated.[64] Yet, by 1878, the overall proportion of adulterated samples in the retail trade was down to 19.2 percent (15 percent in excluding spirits), and this in spite of the growing number of samples examined by local authorities. While the adulteration of milk remained disturbingly high at 24.1 percent, bread and beer

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[62] Burnett, *Plenty & Want*, pp. 118-9, 242, 251.
[63] Arthur H. Hassall, 'Adulteration, and its Remedy', *The Cornhill Magazine*, Vol. 2, No. 1 (1860), pp. 86, 88.
[64] Scott, 'On food', pp. 156-7.

demonstrated a noticeable improvement at 7.4 percent and 9.3 percent respectively.[65] Adulterated samples declined to 15.07 percent in 1882, before reaching 10.8 percent in 1888.[66] Out of 49,555 samples examined in 1898, 8.7 percent were found adulterated, the lowest percentage ever recorded until then.[67] Given the resilience of adulteration in milk, butter, coffee and spirits, these different figures underestimate the extent to which articles of heavy consumption like bread, flour, beer, sugar, jam and tea exhibited comparatively low level of adulteration. And while it was still possible to find low quality meats at the beginning of the twentieth century,[68] its general quality had drastically improved from the 1870s on (Appendix C).

As Burnett has convincingly argued, the blind faith of the Victorian legislators in the ideology of *laissez-faire* was seen in their general disinterest to interfere between sellers and buyers. Yet, while the government had effectively moved toward removing any obstacles to market competition at the national level, notoriously through the repeal of the Assize of Bread in 1815 and the relaxation of licensing policy under the Beerhouse Act of 1830, in 1853, just before Gladstone's Free Trade Budget, there were still many articles (e.g. tea, pepper, coffee, brandy, rum, British spirits, sugar, butter, cheese) of working class consumption upon which severe duties were levied.[69] This was very much the ideological framework informing the report from the 1856 Select Committee. 'If,' the report went on, 'as regards the adulteration of articles with substances of a cheaper and

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[65] 'Seventh ARLGB', *PP* XXXVII, Part. I (1878), pp. xcii-iv.
[66] 'Twelfth ARLGB', *PP* XXVIII (1883), p. cvi; PP 1889, p. cxlix.
[67] 'Twenty-Eighth ARLGB', *PP* XXXVII (1899), p. cxxxiii.
[68] Roberts, *The Classic Slum*, p. 113; Keir Waddington, *The Bovine Scourge: Meat, Tuberculosis and Public Health, 1850-1914* (Woodbridge, 2006).
[69] Burnett, *Plenty & Want*, pp. 110-15.

innocuous character, the public derive the full benefit of this cheapness in a lower price, it would be difficult, if not unwise, for the Legislature to interfere... But, whenever an article is so adulterated as to involve pecuniary fraud or injury to health, it appears to your Committee to be the duty of the Legislature to provide some efficient remedy.'[70] As the *Times* aptly remarked:

> Great efforts were made by some members of the committee to get this whole question of adulteration regarded strictly according to the rules of political economy, and treated simply as a question of supply and demand. It was assumed that the public could tell a genuine article from a mixed one because it was cheaper, and, upon that assumption, the inference was made that, after all, the seller of mixed or adulterated articles only met the wishes of the public in the kind of article he sold. The public had rather have a cheap article mixed than a dearer one genuine, and they got what they wanted; there was no pecuniary fraud in such a transaction.[71]

By the end of the 1860s, James Greenwood could still attack with bitter irony Parliament's inaction. As he pointed out, unless the customer 'finds the time and money to provide himself with a scientific education, and becomes an accomplished scholar in chemistry, able to detect adulteration at sight or smell', he or she 'must endure to be

[70] RSCA1856, pp. xv-xvi.
[71] *The Times*, Wednesday, August 20 (1856), p. 5.

cheated in weight and measure, and slowly poisoned in the beer he drinks, and the bread he eats'.[72]

Despite the appalling quality of food in the 1850s and 1860s, reluctantly acknowledged by the government itself in various reports, the state was very slow to act. The first Food Act of 1860 was an utter failure. As William Purvis, a master baker in London and chairman of the South Metropolitan Master Bakers' Society, put it:

> When the Act passed ... there was an immediate apprehension among those bakers in the trade who adulterate their bread that they would be liable to have their bread frequently analysed, and their premises searched for alum or other things that they ought not to use. But when it was found that no sufficient means were provided by the Act to meet the expenses of this kind of active and constant supervision, (the purchaser having to pay the analyser,) they became confident again, and have resumed their practice of adulteration without any fear of detection.[73]

Caught between the sacred ideology that the state should not interfere in the market and the widespread abominations of adulteration, the legislators imparted the optional responsibility for the quality of food to the local authorities without funding to help them cover the costs associated with the implementation and daily management of the Act. Hassall, who predicted that the 1860 Act would be a dead letter, understood all too well that in the absence of compulsory legislative machinery organised around a central

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[72] James Greenwood, *The Seven Curses of London* (London, 1869), p. 163.
[73] RGCJB, § 504 (Purvis).

authority, it was difficult to believe 'that these vestries, composed as in great part they are of tradespeople, will be desirous of carrying out the Bill efficiently.'[74]

In spite of the obvious fact that the 1860 Act was a toothless piece of legislation mistakenly premised upon the idea that the market would somehow correct itself within the context of cut-throat market competition, it nonetheless represented the first attempt by the state to act upon the problem, the scale and scope of which had reached dangerous proportion. In this respect, the Act may have contributed to an increase of public outrage and consciousness over the worst forms of adulteration (i.e. those that were severely poisonous). In spite of this vain effort, however, evidence strongly suggests that adulteration not only continued unabated throughout the decade, but in fact accelerated. The Adulteration of Food, Drink and Drugs Act of 1872 went further, but its overall performance was put into question when a Select Committee appointed to evaluate it concluded that it might be of 'some consolation to the public to know that in the matter of adulteration they are *cheated* rather than *poisoned.*'[75] While it is obvious from such admission that the morality of the capitalist class was seriously undermined, it should be noted that the opinion expressed by the authorities appointed to evaluate the Food Act of 1872 was not without its own ambiguities. For if by 'poisonous' adulteration we mean the decline and subsequent eradication of the use of directly harmful matters such as various leads or acids, then there are good reasons to embrace the conclusion of the Committee that by the mid-1870s the use of such matters had effectively been curbed. But if by 'poisonous' adulteration we mean something larger and capable to encapsulate

[74] Hassall, 'Adulteration, and its Remedy', p. 91.
[75] 'Report for the Select Committee on Adulteration of Food Act (1872)', *PP* VI (1874), p. viii.

the detrimental effects of long-term exposure to adulterated food on human health and well-being, then there are grounds to argue that the public was poisoned at least until 1914, albeit in a drastically less severe way.

The landmark piece of legislation in the regulation of food came with the Sale of Food and Drugs Act of 1875, which constituted the first comprehensive framework fully dedicated to the establishment of pure food. Burnett has argued that a decade after the 1875 Act, 'a remarkable improvement had already been effected in the quality of basic foods – so much so that a good case may be made out for regarding the 1880s as the crucial period in the suppression of adulteration and the establishment of food purity.'[76] Though Burnett is certainly right to impart to the legislative process an important degree of responsibility in the gradual suppression of food adulteration, especially after the 1875 Act, this should not mask the fact that major improvements had already been registered earlier in the 1870s, and which suggest that however important the state may have been, it was never the – or at the very least, the only – driving force behind pure food.

The legal division of labour, whereby the responsibility for the implementation of national regulations and policy over food and its adulteration was given to local authorities, tended to undermine the legal comprehensiveness of the different acts dedicated to food purity. Local authorities were not always zealous in applying them, thus promoting a legal environment characterised by the uneven local and regional enforcement of national regulations. The problem was apparent at the level of food analysis. Only a few years after the enactment of the 1875 Food Act, in several English

[76] Burnett, *Plenty & Want*, p. 260.

counties and most of Wales, no analysis was undertaken, and counties like Buckingham, Essex, Kent, Oxford and Suffolk together only furnished 30 samples.[77] Between 1877 and 1882, the number of authorities who had appointed analysts under Section 9 of the 1875 Act rose from 153 to 224. Yet, the ARLGB of 1883 complained that 'there are still many populous towns, and yet more rural districts, where the Acts are a dead letter, and where the dairyman may safely water his milk, and the grocer add chicory to his coffee. ... Analysts have been appointed, as we have said, practically throughout England, but in many cases nothing is given them to do.'[78] Moreover, major disparities existed in the collection of food and beverage samples. With one sample for every 551 persons in 1889, London fared comparatively well with the provinces, which obtained one for every 1,141 persons. Yet, even in the metropolis important variations existed, with Fulham counting one sample for every 289 persons and St. Mary's Newington one for every 7,190 persons. By the late 1880s, in 'about a quarter of the population of the whole of England and Wales, the Acts were practically a dead letter, since only one sample was examined for every 7,864 persons.'[79] And while the number of samples steadily increased over the years, there were still important metropolitan authorities like Liverpool, Manchester, Birmingham, Bristol and Salford that only took about two samples per thousand of the population at the end of the nineteenth century.[80]

The important point here is that in spite of the failure of the government to act comprehensively and systematically and provide financial and administrative support at

[77] 'Seventh ARLGB', *PP* XXXVII, Part. I (1878), p. xciii.
[78] Twelfth ARLGB, p. civ.
[79] 'Eighteenth ARLGB', *PP* XXXV (1889), pp. cxlix-cl.
[80] Twenty-Eighth ARLGB, p. cxxxii.

the municipal level, the quality of food was no doubt improving. My argument is that, more important with respect to the increase in the quality of food, including the gradual decline of adulteration, was the declining price of food. Already in 1874 the total amount of 'grossly prepared teas' was said to be 'small, and is kept in check mainly by the low price of pure teas.'[81] The ARLGB of 1889 highlighted the role of cheap food clearly:

> The adulteration of bread and flour seems to grow less and less; partly no doubt because their cheapness makes it scarcely worth while to tamper with them. Of 1,118 samples, all but six were genuine. ... The practice of adulterating sugar, which was common in the days of heavy duties and high prices, seems now to have been entirely abandoned. 144 samples were analysed in 1888 and all were found pure.[82]

Herbert Preston-Thomas, one of the general inspectors of the Local Government Board and formerly in charge of the latter's Public Health Department, examined before the Select Committee on Food Products Adulteration in 1894, said: 'I do not suppose it is the administration of the Act that has made adulteration disappear in the case of sugar, but the fact that sugar is so cheap that it is not worth adulterating, and I fancy something of the same kind might be said with regard to other articles where there has been considerable reduction.'[83] In every case, lower food prices undermined the economic

[81] 'Report for the Select Committee on Adulteration of Food Act (1872)', p. iii.
[82] Eighteenth ARLGB, pp. clii-iii.
[83] 'Report from the Select Committee on Food Products Adulteration', *PP* XII.1 (1894), Q. 257 (Preston-Thomas).

basis for adulteration by rendering pure food as cheap as its previous substitutes. Moreover, the cheapening of the food basket tended to act as a strong solvent against the practice, which often necessitated more labour.

'The worst food comes to the poor,' George J. Holyoake told a group of twenty-eight poor weavers in 1844, 'which their poverty makes them buy and their necessity makes them eat. Their stomachs are the waste-baskets of the State. It is their lot to swallow all the adulterations of the market.'[84] Yet, on the eve of the First World War, the quality of food obtained was hardly comparable to the appalling situation prevailing during the middle decades of the nineteenth century, and no doubt Mitchell's claim in 1848 'that much disease is induced by the use of damaged or adulterated provisions' did not hold anymore.[85] As Mr Bremner, master baker for 27 years now established in London, suggested, cheap bread in the early 1860s only came at the price of 'an inferior article and less weight.'[86] The same was true for virtually all food commodities. Widespread adulteration was never simply the result of heightened competition or greedy shopkeepers, but also captured to a great extent the poverty of a population in the context of deficient food supply. In other words, the working class's ability to consume a certain basket of food goods during the middle decades of the nineteenth century became increasingly premised upon finding ways to cheat customers through articles of vastly inferior quality.

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[84] Holyoake, cited in Burnett, *Plenty & Want*, p. 145.
[85] Mitchell, *Treatise of the Falsifications of Food*, p. x.
[86] RGCJB, §470 (Bremner).

The growth of adulteration during the second and third quarter of the nineteenth century makes it rather difficult to see this period as intrinsically positive for the working class. Not only were they cheated on every single article of food they bought, but also daily poisoned by the addition of highly dangerous substances. The shift away from deadly adulteration and the decrease in the widespread use of cheaper substances of lower nutritional value represented nothing short of a daily revolution in consumption and a drastic improvement in people's health and living standards. It also meant the decline of a nationwide fraud on working people's finances whereby the poor systematically got less nutritional value for their money. The evidence thus suggests that the cheapening of the commodity labour-power through cheap food was both a quantitative and qualitative phenomenon.

Motherhood and Infant Mortality

The ways in which gendered social relations mediated poverty in general, and the uneven distribution of food amongst the members of the household in particular, is further complicated by the changing quality of food over the period under review. For it was never simply the quantity and variety of food that was unevenly distributed, but its quality as well. Together they help to explain the paradox of rising infant mortality during the 1880s and 1890s amidst improving living standards (Table 1). Of course, infant mortality was unevenly divided across classes. Mrs Greenwood, one of the Sanitary Inspectors of Sheffield, reported that the death rate of infants in slums stood at

234 compared to 112 in nice neighbourhoods.[87] In the poor districts of Ancoats, Central, St. George's and Clayton in Manchester, average infant mortality for 1898-1902 stood at 214, 226, 217 and 213 respectively.[88]

Poverty and underfed women combined in detrimental ways. Although the use of starchy baby foods, feeding bottles, and cows' and condensed milk to feed infants may all partly explain higher rates of infant mortality, the overriding trend was an attempt to create a substitution for mothers' milk. The mother's health, or lack thereof, translated into the infant's wellbeing, and while the nutritional superiority of breast milk was demonstrated both in the high ratio of breastfed healthy infants and deceased infants who had been artificially fed, the still high rate of infant mortality among breastfed infants suggests that many poor, undernourished women were physically incapable of producing sufficient quantities of good milk.

Of course, physical debility was anything but new, and the mediation of capitalist contradictions in part through women's bodies, as we saw in the last chapter, is a strong reminder of gendered social relations around food consumption and distribution. By 1865 Dr Brown already observed

> the diminishing power of English women to suckle their offspring. The complaint, technically termed hyper-lactation, is one very familiar to the medical eye. The physician recognises it at a glance. The countenance of the mother resembles more a wax cast than the face of a living human being; the lips are colourless; the cheeks

[87] IDCPD, Vol. 2, QQ. 8231-4 (Greenwood).
[88] Marr, *Housing Conditions in Manchester & Salford*, p. 42.

> are colourless; the white of the eye is throughout of a pearly whiteness; not the minutest thread of a bloodvessel can be seen shooting across it; the whole aspect of the poor woman bears testimony to her exsanguinous condition. When from the very legible face of the mother eye is directed to the peevish countenance of the infant which she bears in her arms, he sees its resemblance to that of a dwarfish old woman. Instead of the rounded and plump cheeks of infancy, the cheeks are sucked into the gums; the cheek-bones are high, and the wrinkled forehand looks unnaturally large in proportion to the shrunk and shrivelled face. Even in the fretful whine of the poor infant there is something which sounds like feeble old age. It will only be found that a diarrhoea under which the child is suffering is the motive of the mother's visit to the institution. The medical man sees an ill-fed mother, whose feeble frame is still further enfeebled by the scanty nutriment drawn from it by the act of nursing, and a child very imperfectly nourished, and with its bowels irritated by the thin and acrimonious milk (if milk it can be called) secreted by the mother.[89]

Forty years later, in Middlesbrough, it was estimated that improper feeding accounted for at least one-third of the children who died under twelve. As Lady Bell put it: 'What chance has the welfare ... of the children ... brought into the world by a mother whose strength, owing to imperfect nourishment and unhealthy surroundings, must be steadily declining under this immense strain as time goes on?'[90]

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[89] Brown, *The Food of the People*, pp. 2-3.
[90] Lady Bell, *At the Works: A Study of a Manufacturing Town* (London, 1907), p. 198.

In the last chapter we saw how an insufficient diet was detrimental, causing a whole series of diseases and disorders very likely to impact people's lives in important ways. What I would like to suggest in this section is that changing food properties were also very significant in determining one's nutritional achievement, especially for childbearing and childrearing women. In this respect it might be interesting to start from physician John Snow's piece in the *Lancet* in 1857 in which he linked the adulteration of bread with alum and rickets. Snow was an apprentice in Newcastle from 1827 and 1833 before serving as an assistant in practice in Burnop Field, Durham, and Pateley Bridge, Yorkshire, until 1836. That same year he moved to London to complete his studies, started working at the Westminster Hospital in 1837, was admitted at the Royal College of Surgeons in 1838 and started his own practice in the poor district of Soho in 1839, which George R. Sims would later describe as a 'land of contrasts' where 'hunger gazes from morning to night on a feast of Tantalus.'[91] Snow was struck by the number of cases of rickets that he saw in London: 'in children in their second and third year, it seemed almost the rule, and might be observed in the streets and the parks, as well as amongst children brought for advice.'[92] Milk could not be the source of rickets, he reasoned, since bow legs and other rachitic deformities were rare in the mining and manufacturing districts of the north east in spite of the very small quantity of milk consumed. He soon realised that rachitic deformities were prevalent in areas where baker's bread adulterated with alum was universally consumed, while children from the northern counties, where home-baked bread remained the custom because of cheap coals, rarely showed rickety

[91] George R. Sims, 'Trips about Town', Part 1, *Strand Magazine*, Vol. 29, No. 171 (1905), p. 273.
[92] John Snow, 'On the adulteration of bread as a cause of rickets', *The Lancet*, July 4 (1857), p. 4.

signs. Relying on the findings of German chemist Justus von Liebig, Snow hypothesised 70 years ahead of modern evidence 'that aluminium salts react with phosphorus-containing compounds to form insoluble aluminium phosphate', thus inhibiting 'the absorption of dietary phosphorous required for the formation of skeletal 'phosphate of lime'.'[93]

However important Snow's observations were, their relevance may well lie elsewhere. For one, rachitic deformities could still be observed on the eve of the Great War, in spite of the fact that the use of alum had virtually disappeared for more than three decades. Without disproving Snow's hypothesis, this certainly reasserts the extent to which a deficient diet remained the primary cause of rickets. Much more important, I believe, was that underpinning the transition from home-baking to the baker's shop was a gradual shift from brown or black bread to white bread. This is particularly relevant to the present discussion, given that this transition involved an important decrease in the nutritional value of bread – a staple of women's diet. The introduction of the roller mill in the 1870s allowed wheat germ to be sifted off even more efficiently to produce a fine flour more resistant to deterioration. What was not appreciated at the time, however, was that by eliminating wheat germ, the new process significantly lowered the nutritional value of the bread (Table 3).

[93] M. Dunnigan, 'Commentary: John Snow and alum-induced rickets from adulterated London bread: an overlooked contribution to metabolic bone disease', *International Journal of Epidemiology*, Vol. 32, No. 3 (2003), p. 340.

> The poor were most affected [by white bread] because they depended to a greater extent than the rich on bread and could not afford to buy other foods which might have readjusted the balance. ... The poorer women just became steadily more anaemic until at an early age their health was gravely undermined. Their waxen, sickly, greenish faces were one of the commonest sights in the streets of the large towns in Victorian days. There must also have been a great deal of infantile anaemia. The children were born iron-deficient, for their mothers could not possibly provide from their own starved bodies enough iron to furnish the reserves with which the normal child should start life.[94]

Already in 1847 *The Church of England Magazine* linked the high consumption of white bread by mothers with infantile rickets.[95] A few years later Dodd reported that according to captains of ships, when, on rare occasions, sea biscuits, commonly called 'hard tack', were made of white flour without bran, sailors tended to become weaker and less healthy.[96] Meanwhile, Professor Johnston, speaking about the superiority of 'whole meal' bread, said that a man's diet solely based on fine white loafs 'would in effect kill him by a lingering starvation.'[97] Importantly, then, what was considered culturally superior and actively researched as itself an element of 'progress' was indeed an important dietary and nutritional setback, especially for the poorest segments of the population where bread remained the staple food.

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[94] Drummond and Wilbraham, *The Englishman's Food*, pp. 388-90.
[95] 'Brown Bread', *The Church of England Magazine*, Vol. 22, No. 646, May 29 (London, 1847), p. 355.
[96] Dodd, *The Food of London*, p. 203. See also: Johnston, *A Hundred Years Eating*, pp. 204-5.
[97] Professor Johnston, cited in RGCJB, p. 140 (Dauglish).

Table 3 Losses in percentage of Vitamins and Minerals in refined white flour

Vitamins & Nutrients		Trace Minerals	
B1 (thiamine)	77.1	Calcium	60.0
B2 (riboflavin)	80.0	Phosphorus	70.9
B3 (niacin)	80.8	Magnesium	84.7
B5 (pantothenic acid)	50.0	Potassium	77.0
B6 (pyridoxine)	71.8	Sodium	78.3
B9 (folic acid)	66.7	Chronium	40.0
Tocopherol	86.3	Manganese	85.8
Betaine	22.8	Iron	75.6
Choline	29.5	Zinc	77.7
		Cobalt	88.5
		Copper	67.9

Source: Henry A. Schroeder, 'Losses of vitamins and trace minerals resulting from processing and preservation of foods', *The American Journal of Clinical Nutrition*, May (1971), Tables 3 and 5, pp. 567, 569.

As we saw in the last chapter, Thomson reported in the early 1880s on the prevalence of rickets in Glasgow and the west of Scotland. What I purposefully omitted to say, however, was that Thomson observed a strong correlation between those localities where rickets prevailed and the type of food consumed.

> And it is to be lamented that a want of chemical knowledge in both the miller and the baker, and the haste to be rich, have fostered, and now pander to, the popular and delusive desire to have white bread. To produce such they are obliged to divest the grain of a portion of its nutritive matter, and thus the food is robbed of a portion of those elements from which the different organs of the body are formed... This degraded taste has been slowly developed; and in proportion to the increased consumption of this masked deception in the form of flour, there has been a

> diminution in the use of oatmeal—indeed, so much so, that it is no unusual occurrence to hear of working-men's homes in which the old and nutritious article of diet, porridge, is never used.[98]

Thomson's awareness of the combination between the cultural demand for white bread and the nutrition loss entailed by the production of fine flour is remarkable. It is indeed very interesting that Thomson observed that rickets was closely correlated with 'those localities where white wheaten bread, sugar, and tea have taken the place of the old nutritious porridge and milk', and was 'seldom heard of' where oatmeal had remained the staple of food.[99] Moreover, rickets was much less frequent in northern England – as observed by Snow – and the northwest of Scotland, where oatmeal remained largely in use.

This nutritional loss was further reinforced by the widespread use of margarine from the 1870s onward, though there was 'a tremendous resistance' to it, as 'it stood as the very symbol of a poverty-stricken diet.'[100] Butter naturally contains vitamin A, D and E as well as minerals (calcium, phosphorus, magnesium, potassium and iodine) that are not present in margarine. The addition of vitamins to margarine did not begin until the 1920s, so that its only advantage until then was its cheapness. Moreover, with the gradual dietary change from treacle to sugar, a very important source of calcium and iron was lost. It is therefore arguable that poor women who survived on bread, margarine, sugar

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[98] Thomson, 'On the Prevalence of Rickets', p. 235.
[99] Thomson, 'On the Prevalence of Rickets', pp. 256-7.
[100] Roberts, *The Classis Slum*, p. 109. See also: Drummond and Wilbraham, *The Englishman's Food*, p. 306.

and tea, supplemented perhaps with rare and meagre bits of meat, may in fact have experienced a net decrease in their food's nutritional value amidst general improvement. The introduction of new, mass produced food commodities could therefore be detrimental to people's health, thus suggesting that the idea of 'progress' cannot be studied in abstraction of the historically specific social relations through which food is embodied.

For infants, matters were made even worse by the general lack of satisfactory substitutes for breast milk.[101] And while the feeding bottle – then unrecognised as a hotbed for germs[102] – and artificial (farinaceous) baby foods made their appearance on the market, condensed milk was often the only food mothers could afford to feed their infants.[103] Introduced in the 1870s, its cheapness made it accessible to poor households. The drink was sweetened with sugar to extend the life of the tin. Low in fat and vitamin A, C and D, condensed milk was grossly inappropriate to feed to infants. Roberts recalls that the corner shop sold 'great quantities of condensed skimmed milk at two tins for 3.5*d.* [which] contained plenty of sugar and no fat at all and doubtless contributed to the fact that around 1904 one in six babies in the district [of Salford] died within the twelvemonth.'[104] As one commentator noted in 1900, to feed infants 'upon skimmed milk, or still worse upon separated milk, is simple starvation.'[105] Unsweetened cows' milk was hardly better, as we shall see in Chapter 7.

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[101] IDCPD, Vol. 2, QQ. 12,052-3 (Vincent).
[102] Drummond and Wilbraham, *The Englishman's Food*, p. 374; Roberts, *A Woman's Place*, p. 166; Gertrude M. Tuckwell and Constance Smith, *The Worker's Handbook* (London, 1908), p. 21.
[103] 'Forty-First ARLGB', *PP* XXXV, Part I (1912), p. 173; IDCPD, Vol. 2, QQ. 12,975-81 (Hawkes).
[104] Roberts, *The Classis Slum*, p. 112. See also: IDCPD, Vol. 2, Q. 437 (Eichholz); Pember Reeves, *Round about a Pound a Week*, pp. 99-100.
[105] 'Twenty-Ninth ARLGB', *PP* XXXIII, Part I (1900), p. cxlvi.

As many commentators complained, the poor quality of food for infants put them at risk of developing rickets, scurvy, and other diseases and cognitive and physical developmental problems associated with malnutrition and undernourishment.[106] Beyond the manufacturing of substitutes for mothers' milk, the main question, however, that needs to be asked is why there was a need for them to begin with. Continuously threatened either by insufficient wages in the formal economy or by gendered social norms in the household or both, the fragile and unstable physical integrity of women was often transmitted to their children. Barrymore Smith has pointed out that malnutrition during the foetal period and in infancy

> is associated with subsequent intellectual impairment and passivity and abnormality in behaviour. There is even clearer evidence that children deprived in infancy are more subject than their peers to defects in eyesight and hearing, and to illnesses which hinder their subsequent development.[107]

As Wohl put it: 'A great gulf existed between Victorian ideals of 'motherhood' and the working-class reality: thousands of babies were born annually to mothers who were underweight and undernourished...'[108] In many cases, then, pregnant women and mothers alike physically embodied persistent inequalities in the distribution, quality and nutritional properties of food, which resulted in undernourished mothers incapable of

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[106] IDCPD, Vol. 2, QQ. 1,219-20, 1,330 (Smyth), 4,991 (Rowntree), 12,069 (Vincent); Drummond and Wilbraham, *The Englishman's Food*, p. 387; Roberts, *The Classic Slum*, p. 79.
[107] Barrymore Smith, *People's Health*, p. 128.
[108] Wohl, *Endangered Lives*, p. 12.

providing proper nutrition to their infants. While this further demonstrates the need to problematise food as a socially mediated good, it also reveals the extent to which improvements in food quality, as documented in the previous section, are alone insufficient to understand people's daily consumption. After all, the availability of different types of food such as white bread, margarine and skim milk responded as much to cultural, economic and scientific concerns and beliefs as they did to public awareness of food adulteration. Both the quality and nutritional properties of food are therefore essential to an understanding of the ways in which food was socially mediated and embodied unevenly within the social fabric.

Conclusion

This chapter has argued that food cannot be taken as unchanging in the evaluation of social and historical change. Any attempt to understand the evolution in living standards cannot stop at numeric figures concerning prices and quantities of food obtained, as important as these are. Meat, beer or bread between 1850 and 1914 were never simply meat, beer or bread, and to overlook this is to fail to problematise the profound importance and social meaning of food as a qualitative, dynamic phenomenon. Analysing the qualitative and changing nature of food therefore makes it possible to appreciate the way in which more traditional, quantitative approaches to social change have tended to obscure the positive impact of increased food quality. Moreover, it illuminates the ways in which changing physical properties of food worsened the condition of poor segments of the population, particularly for women and children.

Beyond the price form, then, lies a deeper social history that complicates both ideas of 'progress' and 'improvement,' and exposes the need for a historical approach sensitive to the changing, uneven embodiment and distribution of food across class, gender, and generational divisions.

In so doing I have maintained that economistic approaches to working class's living standards between 1850 and 1914 have tended to both underestimate and overestimate the importance of social changes during this period. In this respect, the question of living standards is simply not reducible to quantitative calculations alone. By recovering the qualitative nature of food and the ways in which it affects people's daily lives, a much more complex and contradictory history of social change emerges, one that frustrates hasty conclusions over the idea of 'progress' and the reductionist linearity of the progressive development narrative. Indeed, evidence presented in this chapter suggests that human underdevelopment and lower nutritional achievements amidst rapid economic growth and capital expansion went hand in hand. By looking at the ways in which food quantity and quality are distributed, both at the level of society and at the level of the household, this analysis sheds new light on the complex relationship surrounding food relations and the ways in which they mediate people's well-being, health, and physical and psychological integrity. Furthermore, it opens rich avenues to look at the different ways in which people reconciled the demands for capital accumulation with the reproductive demands for physical, familial and communal integrity, and how the contradictions emanating from this tense relationship are always embodied in socially different ways according to how food is distributed.

Of course, eating habits and cultural preferences for certain types of food, class consciousness and gender norms in relation to the kind of food consumed, regional variations in the distribution of food and its adulterations, the role played by the Co-operative movement in effecting changes in the supply of food, the legal empowerment of municipal governments and the establishment of a national regulatory framework for food purity, as well as the political-economic forces behind the massive import of cheap food from the 1870s onward, were all powerful elements that shaped, and were shaped by, the changing qualitative properties of food. This chapter, however, has set for itself the much more limited purpose of demonstrating that food cannot be reduced to numeric data, and that its intrinsic, yet changing qualitative nature is of the utmost importance to the assessment of people's health and living standards. Problematising food and its consumption as a dynamic, socially mediated process offers a rich complement to quantitative forms of analysis which have largely defined the living standards debate to date, and leads us towards a more nuanced and complex social history of unevenly embodied historical change.

Part II: The Social and Material Costs of Cheap Food

3. Public Markets and the Constitution of the Bourgeois Distributive Order

Is a market *a* market or is a market a metaphor?[1]

The reorganisation of the medieval marketplace along capitalist lines represents one of the most important social, economic, and architectural transformations of the urban environment of Britain during the nineteenth century. Most importantly, the marketplace was at the center of the struggle between a landed aristocracy and a rising capitalist class over the control of urban space, and represented one of the most powerful elements in the institutional toolkit of the newly formed Corporations in tackling the problems associated with rapid urbanisation. For a growing proportion of the population living in urban settings and dependent upon the market for survival, then, the transformative adaptation of the public market remained one of, if not *the*, single most powerful institution for providing the population with sufficient food. Whatever role small-scale retailers (e.g. street hawkers and shopkeepers) and large-scale retailers (e.g. Co-operative societies and multiple shops) would come to play, public markets remained fundamental structures of the food distributive system.

In spite of its importance to Victorian and Edwardian industrial towns, the marketplace has often been downplayed by the literature on the history of retailing and consumption. Indeed, the study of the developments in urban retailing associated with the so-called 'retailing revolution', especially trends in capital-intensive ventures, such as the

[1] Edward P. Thompson, 'The Moral Economy Reviewed', *Customs in Common: Studies in Traditional Popular Culture* (New York, 1993), p. 273.

Co-operative movement, multiples and the department store, have received a fair amount of attention over the years, resulting in the implicit or explicit downplay of the public market as an institution of food distribution. This is nowhere better illustrated than in James B. Jefferys' classic study of retail trading in Britain where he argues that between 1850 and 1914 public markets were 'decaying and moribund institutions'.[2] The same treatment is noticeable in *The Cambridge Urban History of Britain*, which, for all its remarkable achievements, in a book of almost 1,000 pages, entirely avoids the subject, except for rare, scattered references.[3] Part of the problem here is the tendency to universalise London's experience to provincial towns. As James Schmiechen and Kenneth Carls have extensively documented, however, the idea that the public market, especially in its most developed form, the market hall, was a somewhat archaic medieval institution simply does not hold. In fact, market halls were often thriving public institutions of great civic pride where people gathered *en masse* to obtain their food.[4]

Edward P. Thomson reminds us that 'the market' is both a definite *physical* space of exchange and a *metaphor* of an economic process of exchange.'[5] In this chapter I contend that the emergence of the market as a process of exchange must be situated historically through the transformation of the marketplace as a physically delimited zone of exchange. More specifically, I argue that the rise of the new bourgeois order was established through the control over the space of distribution within which commodities

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[2] Jefferys, *Retail trading in Britain*, p. 39.
[3] Martin Daunton, ed., *The Cambridge Urban History of Britain*, Volume 3, 1840-1950 (Cambridge, 2000).
[4] Schmiechen and Carls, *The British Market Hall*.
[5] Thompson, 'The Moral Economy Reviewed', p. 273. See also: Martin Phillips, 'The evolution of markets and shops in Britain', in *The evolution of retail systems, c.1800-1914*, ed. John Benson and Gareth Shaw (Leicester, 1992), p. 57; John Bohstedt, *The Politics of Provisions: Food Riots, Moral Economy, and Market Transition in England, c.1550-1850* (Farnham, 2010), p. 4.

moved in space, a process that entailed the substitution of capital's market based 'moral economy' in the place of Edward P. Thompson's socially based moral economy of the crowd.[6] In other words, capital's control over the infrastructure of food distribution through its capacity to diminish the friction of food commodities in space by providing sufficient market accommodation was key to the system's ability to lower the cost of labour power through cheap food. The 'production' of cheap food was not limited to free trade policies and mass food imports, but also rested on the transformation of the marketplace into an institution of mass distribution.

The chapter is divided into two sections. In the first, I document the social, economic, and legal transformations that underpinned the gradual evolution of the traditional marketplace into a capitalist institution of primary importance in controlling the urban environment in general and the town's food supply in particular. The capacity of local authorities to provide town inhabitants with cheap food was intimately linked with their political willingness to implement market reforms conducive to the increase in the flow of goods. As I discuss in the second part of this chapter, however, the constructions of new markets and the reformation of old ones, although crucial, was in and of itself insufficient, and was very much linked to the capacity of joining public markets as sites of mass food distribution with railways as technologies of mass food circulation.

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[6] Edward P. Thompson, 'The Moral Economy of the English Crowd in the Eighteenth Century', *Customs in Common: Studies in Traditional Popular Culture* (New York, 1993), pp. 185-258.

The Rise of the Bourgeois Marketplace

The definition of the public market by the Royal Commission on Market Rights and Tolls (RCMRT) as 'an authorised public concourse of buyers and sellers of commodities meeting at a place, more or less strictly limited or defined, at an appointed time' is a perfect example of the 'market' understood in its first meaning.[7] This definition is important as it specifies the three pillars upon which *both* market *and* fairs rested on: authority, space and time. The difference between a market and a fair was one of degree rather than nature. A fair was understood quite simply as a larger market that was held less frequently, often over a longer period of time, and usually was of a more general character. Whereas fairs were held only a few times a year at stated dates, markets were held at least once a week.

Throughout medieval times fairs and great marts served an important commercial function. Held in virtually all the towns of the country and several villages, fairs were generally held in spring and autumn. They offered a greater variety of common goods, which were not always easily procurable, and introduced novelties. Fairs also played an important wholesale function. Shopkeepers, institutions such as colleges and hospitals, and the house of great landlords would stock for months. In spite of its general character, the distribution of foods and manufactured goods remained the most important commercial function of this bi-annual market, there were a series of more specialised fairs, and in this respect the statute or hiring and the cattle fairs predate and inform our modern labour and cattle market in important ways.

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[7] RCMRT, Vol. 11, *PP* XXXVII.1 (1890-91), p. 2.

Contemporaries understood very well how the development of more efficient means of communication was a major cause for the waning of the fairs. Indeed, the RCMRT emphasised the extent to which the very existence of the fair as a commercial concourse was itself tributary of a limited and limiting transportation system and how, in fact, it sought to overcome spatio-temporal difficulties in relation to the movement of commodities in space by concentrating commercial activities over a fixed period of time.

> When the growth of trade progressed faster than the improvement of the means of communication, the value of fixed centres of periodical exchange was great; but as the means of communication improved, the great marts of Plantagenet, Stuart, and Tudor times, have, as Professor Rogers says, "degenerated into scenes of coarse amusement, and after having been granted and protected as the highest and most necessary franchises, have been tolerated for the sake of their traditions, and are now being generally suppressed as nuisances."[8]

Already in the eighteenth century improvements in roadways were starting to undermine the necessity for fairs. By the early nineteenth century an important network of canals was in place, contributing further to linking localities and regions with one another. Such was the case of the Sturbridge fair. One of England's great marts in the first decades of

[8] RCMRT, Vol. 1, *PP* LIII.1 (1888), p. 4.

the eighteenth century, by 1800 its importance had seriously declined as a result of the increase in the density and reliability of roadways and waterways.[9]

The rapid expansion of the railway in the 1830s and 1840s destroyed the *raison d'être* of the fair as a commercial venture. The single and most important exception to this, however, was the cattle fair, which greatly benefitted from the new possibilities afforded for livestock transportation. The fair would continue to exist in two main forms. Just as the canal survived the age of railway by redeploying itself on a world stage (e.g. Suez Canal, Panama Canal), so did the fair. With the Great Exhibition held in London in 1851 emerged the world fair, a tribute to the rescaling of the fair as commercial and industrial at the international level.[10] In the same way that the fair would be allowed to exist only because it offered a fixed gathering in relation to which different societies, social classes and the like could align their own spatio-temporal relation with. It offered, in other words, a point of reference in time and space for everyone to convene. On the other hand, the receding economic life of the fair saw its gradual taking over by another great social function historically attached to the fair, amusements. In this respect, the rise of the 'pleasure fair' during the nineteenth century was less of a new development than the accentuation of one of the institution's intrinsic components. Fairs were always anticipated with great impatience for weeks in advance and no doubt constituted an important moment in the town's calendar. One could assist to the performance of

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[9] Jonathan Brown, *The English Market Town: A Social and Economic History 1750-1914* (Marlborough, 1986), p. 41.
[10] David McNally, *Bodies of Meaning: Studies on Language, Labor, and Liberation* (New York, 2001), p. 157.

conjurers, jugglers and strong ladies, as well as enjoy theatrical presentations, wrestling booths, spectacles, puppet shows, swings, roundabouts and the like.

In spite of these developments, however, the fair was rapidly declining. As it happened, Parliament, rather than protecting this endangered species, gave ammunition to its detractors. The Fairs Act of 1871, which stated that the Secretary of State for the Home Department could abolish a fair on representation of magistrates, with consent of the owner, was prefaced with: 'Whereas certain of the fairs held in England and Wales are unnecessary, are the cause of grievous immorality, and are very injurious to the inhabitants of the towns in which such fairs are held, and it is therefore expedient to make provision to facilitate the abolition of such fairs'. By 1881 over 700 English fairs had been abolished. The suppression of the fair on the basis of it being a public nuisance was based on a growing concern for order and propriety, as well as with the supposed immorality of an environment encouraging promiscuous behaviours.[11]

Meanwhile, the industrial regularity with which the railway conveyed commodities completely transformed the traditional marketplace into one of the institutional pillars of capitalist social relations. Given the nature of the fair, the latter tended to reproduce a conception of the market as an opportunity rather than as an imperative.[12] The resilience of the public market ultimately lay in its ability to adapt to the reproductive pace of a growing urbanised working-class entirely dependent on the market for survival. Indeed, one of the marked features of the public market between 1850 and 1914 in comparison to

[11] McNally, *Bodies of Meaning*, p. 157; Brown, *The English Market Town*, pp. 41-2, 149-50.
[12] Ellen Meiksins Wood, 'The Question of Market Dependence', *Journal of Agrarian Change*, Vol. 2, No. 1 (2002), pp. 50-87.

previous periods was the predominance of the selling of food, including meat, fish, milk, cheese, fruit, vegetables, poultry, eggs, butter and provisions. In addition, the market was held at least once a week, most probably on Saturdays, and very frequently the market was held two to three days per week. In large towns and in the metropolis, public markets were opened every day, except on Sundays and at Christmas.[13]

The battle for the authority over the market was an important one, though, as we shall see in the next chapter, the importance of 'unauthorised' or informal markets in the distribution of cheap food remained vital throughout the period under review. Market authorities held an important power over the town's food supply and the spatio-temporal dynamics that regulated the marketplace. The evolution of public markets in Britain must be understood through the contradictions that arose from the development of capitalist social relations within the context of a feudal legal apparatus of manorial market rights. The loss of autonomy *vis-à-vis* the market through the formation of a working-class entirely dependent on the market for survival not only transformed the social relations of production, but also put tremendous pressure on existing market accommodations and distributive infrastructures. From medieval times, the traditional market system had evolved through royal grants and charters that gave the monopoly of market rights to the lord of the manor. Such royal grants usually specified when and where the market would be held and authorised its owner to levy tolls and other dues.[14] Moreover, under fourteenth-century common law, markets were supposed to be held seven miles apart

[13] RCMRT, Vol. 13, Part 1, *PP* XXXIX.665 (1890-91); RCMRT, Vol. 13, Part 2, *PP* XL.1 (1890-91); RCMRT, Vol. 13, Part 3, *PP* XLI.1 (1890-91).
[14] RCMRT, Vol. 2, *PP* LIII.237 (1888), Q. 17 (Provis); RCMRT, Vol. 11, p. 2.

from one another in order to provide the lord of the manor with exclusive rights over commerce. At the dawn of the nineteenth century, most English and Welsh markets belonged to local manorial families, which, with very few exceptions, tended to subject the public interest to their own profits by showing little to no interest over costly improvements and comprehensive reforms. In stark contrast with Scottish markets, which were generally better managed because they were under municipal control from the start, English and Welsh markets were generally poorly managed and deeply inconvenient for both town inhabitants and nearby farmers, and therefore seriously limited the town's food supply.[15]

The traditional marketplace situated at the centre of the town was a perfect model of chaotic urban development and public nuisance, especially in the context of growing urbanisation. Complaints about animals in the streets were common, and mobility and access often difficult. The market often developed by spilling over adjacent streets, further adding to the confusion. It was already clear by the end of the eighteenth century that agrarian capitalism was producing a new crop of town dwellers quickly outgrowing previous paternalist structures. At the same time, rising bourgeois sentiments were becoming more and more critical of the old public market for its contribution to unruly and disorderly scenes. The sanitised conception of the marketplace as an encounter between buyer and seller is indeed a relatively modern construction, which, at that time, had yet to be socially accepted and architecturally stabilised. Meanwhile, contemporaries were all too aware that beyond its exchange function, the marketplace was also an

[15] RCMRT, Vol. 1, p. 26.

important social space for political and cultural exchange and formation. People gathered at the market and its precincts not only to buy and sell, but also to socialise, gossip, drink, celebrate, seek entertainment and, from time to time, voice their grievances. The marketplace offered a 'space of dissent,' a fertile, public ground where social discontent could be expressed *en masse* through (food) riots and public outrage.[16]

Reforms were desperately needed. Ideologically, radicals and other reformists were inspired by classical political economy's understanding of the importance of the relationship between the cost of labour and food prices, and the rising bourgeoisie became increasingly aware that the marketplace could be, and in fact was, an important bottleneck for capital accumulation and profitability. By obstructing the flow of food commodities and limiting the town's food supply, public markets maintained artificially high food prices, thereby contributing to inflation of the 'natural' price of labour. In this respect, the realisation of the need for reforms in the operation and organisation of the public market, as well as the recognition of its role as an institution of capitalist governance, represented nothing short of an early rehearsal to the upcoming struggle over the repeal of the Corn Laws in 1846. Political economy aside, gaining control over the market rights was not a disinterested battle either. And so-called 'radicals' such as shop owners and other tradesmen did not carry the 'flame of progress' for its own sake. It should be borne in mind that the lord of the manor was extremely likely to enforce his rights on market day, and therefore either request goods to be sold exclusively on the site

[16] Edward P. Thompson, *The Making of the English Working Class* (Harmondsworth, 1968); John Bohstedt, *Riots and Community Politics in England and Wales, 1790-1810* (Cambridge, 1983); John Bohstedt, 'The Moral Economy and the Discipline of Historical Context', *Journal of Social History*, Vol. 26, No. 2 (1992), pp. 265-84.

of the market or charge a fee to anybody selling goods for which he had the exclusivity by charter. There can be little doubt that shop owners greatly resented this economic privilege.

Nineteenth century Britain saw the transformation of the public market to fulfil capital's need for greater fluidity and movement. 'The natural progression of the public market', James Schmiechen and Kenneth Carls argued, 'was from the traditional, open-air marketplace to a combination of market place and street market, to an enclosed market site, to a roofed market hall.'[17] Between 1800 and 1850 the floor space of the public markets more than doubled, with Liverpool spending £108,200 between 1822 and 1844 to erect six markets.[18] And while 'just over half of the country's markets were wholly or partially under cover' at the beginning of the 1890s, the vast majority of them were enclosed, spatially delimited market sites.[19]

Few reformed markets embodied the logic and nature of industrial capitalism like the market hall. Essentially a provincial phenomenon, market halls were concentrated in the industrial towns of the north. Their construction was often architecturally impressive and the subject of great civic pride. For instance, at the dawn of the twentieth century, the Kirkgate Market Hall in Leeds was a covered area of over 196,000 sq. ft. (4.5 acres) with a complex glass-and-iron roof, a *Renaissance* façade, and prominent corner entrances housed 83 shops (20 of which were butchers' shops) and 84 stalls.[20] They also responded

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[17] Schmiechen and Carls, *The British Market Hall*, p. 31.
[18] Schmiechen and Carls, *The British Market Hall*, p. 129; RCMRT, Vol. 7, *PP* XXXVII.243 (1890-91), QQ. 13,582-4 (Clare); RCMRT, Vol. 11, p. 52.
[19] Michael Winstanley, *The shopkeeper's world 1830-1914* (Manchester, 1983), p. 6; RCMRT, Vol. 11, p. 54.
[20] Schmiechen and Carls, *The British Market Hall*, p. 274.

to the Victorian ideals of cleanliness and technological progress by offering conveniences such as urinals, water troughs, hot water, lavatories, and, in some cases, the 'unusual luxury' of a telegraph office.[21] In a nutshell, the market hall epitomised the hallmark of bourgeois sensibilities for order 'in the struggle for urban spatial hegemony.'[22] Its architectural design and spatial positioning within the urban landscape was aimed towards fostering both speed and fluidity in the distribution of commodities, and its exclusive dedication to economic activities displayed an obvious appreciation for efficiency through the compartmentalisation and spatial division of social life. Reformed markets also embodied an elaborate internal division of space and function geared towards high turnover, with stalls regrouped into specialist markets (e.g. fish, butcher, confectioner, provision, fruit and vegetables) and organised in rows so as to facilitate the orderly movement and efficient circulation of people and goods within the market.

As Table 4 suggests, one of the main vectors of market reforms between 1800 and 1880 were private and local market acts passed by Parliament, which served different purposes: the construction of a new market, the purchasing or leasing of market rights from the lord of the manor, the rebuilding or enlarging of an old market, or changing market regulations.[23] The shift in the control of markets from Parliament to local authorities came with the Municipal Reform Act of 1835, which granted borough or 'corporation' status to 179 English and Welsh towns. Later legislation – the Markets and Fairs Clauses Act of 1847, the Local Government Act of 1858, and the Public Health Act

[21] RCMRT, Vol. 4, *PP* LV.1 (1888), p. 313.
[22] Schmiechen and Carls, *The British Market Hall*, p. 21.
[23] Schmiechen and Carls, *The British Market Hall*, p. 39.

of 1875 – would uphold the prescriptive right of private market owners, while gradually empowering, especially under the guise of sanitary inspections, local authorities to establish and regulate public markets under certain conditions.[24] By 1886, out of 769 town markets in England and Wales, excluding the metropolis, 313 were under the control of local authorities, 274 were still in private hands, 64 belonged to private trading companies, 57 did not have owners, 39 were managed by commissioners, and 22 had questionable or unclear market rights.[25] In London, for instance, the Duke of Bedford held the market rights for the sale of vegetables, fruit, and flowers at the Covent Garden Market, rights which were originally granted in 1661 to the Earl of Bedford by King Charles II.

As it happened, the transfer from private to public hands could be costly. The lords of the manor were indeed in an excellent bargaining position, for while Parliament upheld their prescriptive rights as private owner of the town's market, local authorities were often desperate to acquire neglected and otherwise inadequate markets for the town's food supply. Darlington paid the Bishop of Durham £7,854 for the town's markets, Birmingham disbursed £12,500 to acquire the market rights from the lord of the manor, Newport paid the Duke of Beaufort £16,500, Oldham roughly £10,500 for Oldham's markets, Sir John Ramsden received £39,802 for the market rights in Huddersfield, and, in 1846, Manchester bought the market rights from the lord of the manor for £200,000. Manchester's regional importance over the food supply might

[24] RCMRT, Vol. 11, p. 9.
[25] RCMRT, Vol. 11, p. 18.

explain why the Corporation of Salford only disbursed £4,481 to acquire the market rights from the Duchy of Lancaster.[26]

Table 4 Market improvement acts passed in England and Wales, 1800-1890

1800-10	1811-20	1821-30	1831-40	1841-50	1851-60	1861-70	1871-80	1881-90
42	27	34	44	56	78	60	30	3

Source: Shaw and Wild, 'Retail Patterns in the Victorian City', p. 284.

For those unable to reach an agreement with the lord of the manor, leasing the market rights was often the only way to gain control over the town's food supply. In 1866 the Corporation of Bradford leased Miss Rawson's manorial rights for 999 years at £5,000 per year, the Corporation being 'compelled to obtain the markets at any cost, because the nuisance occasioned by want of accommodation was so great and the wants of the town were not properly supplied.'[27] The Corporation then borrowed £105,013 in 1866 and 1867 to finance new market accommodations.[28] Wakefield was in the same situation, the bad management of the market giving its owners leverage to negotiate by 'forcing the hands of the authorities to get rid of the nuisance'.[29] But since local authorities almost always made improvements during the leasing period, once the lease expired the lord of the manor was often in possession of a far more valuable property than at the beginning, such that manorial rights could then be rented or sold at higher

[26] RCMRT, Vol. 4, QQ. 3569 (Nalder), 6871 (Steavenson); RCMRT, Vol. 2, Q. 6098 (Fulford); RCMRT, Vol. 9, *PP* XXXVIII.225 (1890-91), Q. 12,737 (Nicholson), p. 576; RCMRT, Vol. 7, QQ. 13,844-6 (Talbot).
[27] RCMRT, Vol. 4, p. 309. Mr Rawson had bought the market rights for £2,100 in 1795, see: RCMRT, Vol. 4, Q. 4985 (McGowen).
[28] RCMRT, Vol. 4, QQ. 5,066-7 (Dunwell and McGowen).
[29] RCMRT, Vol. 7, Q. 12,179 (Chapman).

prices. This was the case of Lord Lilford who owned the rights in Leigh; after a 21 years lease expired in 1885, the owner, who had previously leased the market rights for £15 per annum, was now asking £1,500.[30]

Beyond the acquisition of market rights, however, the provision of better market accommodations required important capital investments. By the early 1890s, Preston had spent £114,556 for its markets, and Blackburn had disbursed £54,407, including £28,000 for a general market hall (1847), about £8,500 each for a retail fish market (1854) and a cattle market (1870), and £9,400 for public slaughterhouses.[31] In Glasgow, the total amount of capital expended upon the markets reached £234,953, of which £180,353 were spent on the cattle market, the dead meat market, and the fish market, and £54,600 upon the slaughterhouses.[32] By way of comparison, the new Metropolitan Cattle Market built in the mid-1850s in London was estimated at over £300,000.[33]

Like many large towns, Edinburgh had a series of general and specialised markets. The Corporation spent over £35,000 upon the fruit and vegetable market, £7,614 on a wholesale fish market, and about £36,000 for the corn market. The Duke of Norfolk, owner of the market rights in Sheffield, spent £121,000 between 1877 and 1888 to improve his markets, pocketing a net income of £9,700 in 1888.[34] Similarly, the Duke of Bedford spent more than £150,000 during the nineteenth century in buildings alone, and by the late 1880s he took on average £13,000 in profit per year.[35] And while small towns

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[30] RCMRT, Vol. 2, QQ. 940-2 (Casson).
[31] RCMRT, Vol. 9, QQ. 14,206-8, 14,288 (Gaine), 14,454 (Birley).
[32] RCMRT, Vol. 7, Q. 15,095 (Stevenson).
[33] Peter Cunningham, *London in 1857* (London, 1857), p. 73.
[34] RCMRT, Vol. 2, Q. 5239 (Ellison); RCMRT, Vol. 4, p. 234.
[35] RCMRT, Vol. 2, QQ. 2556, 2575, 2643 (Bourne).

such as Whitby could yield net income of £192 from their markets in 1888, and places like Spennymoor and Sunderland registered net deficits of £22 and £355 respectively, the Corporations of Liverpool and Leeds were not doing poorly with profits reaching £16,244 and £11,828.[36] By the early 1890s it was estimated that the markets in the hands of the Corporation of London had cost £3,091,342. By way of comparison, the total capital expanded by 40 selected provincial markets was estimated at £2,621,295, which included small provincial markets such as Pembroke (£7,560) and Reading (£9,000), and regional powerhouses like Manchester (£567,989), Liverpool (£246,700), Birmingham (£235,730), Leeds (£162,268), and Newcastle (£104,000).[37] Once broken down, virtually all capital expenditures were in fact piecemeal reorganisation and incremental additions to existing markets.[38]

That local authorities considered capital expenditures on public markets important arose from their recognition that proper market accommodations were powerful municipal levers to secure and control the flow of food commodities coming into town. For instance, fresh capital investments of £48,270 in 1880 and 1883 upon the vegetable market in Birmingham helped to increase the number of carts brought into town from 73,680 in 1873 to 200,000 in 1883.[39] In addition to market infrastructures and buildings, proactive market authorities could also secure a better food supply by encouraging distant producers and retail and wholesale traders to come into town through bylaws, regulatory policies, and other market incentives. The price of fish in Newcastle, for example,

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[36] RCMRT, Vol. 4, pp. 347, 368, 394, 434; RCMRT, Vol. 7, Q. 13,592 (Clare).
[37] RCMRT, Vol. 11, pp. 51-2.
[38] Blackman, 'The Food Supply of an Industrial Town'.
[39] RCMRT, Vol. 2, QQ. 6100, 6104-7 (Fulford).

dropped significantly after the town invested £7,000 in a fish market and quay for the boats supplying it from the fish market at Shields. Moreover, the town promoted the fish trade by paying bonuses to people bringing in fish, allowing the use of the market for free and even paying £5-10 a week for 'tug boats to tow the smacks up here.' Until then, fish retailed at about 1.25*d.* per pound in Shields was sold in the Newcastle shops between 9*d.* and 20*d.*[40] Similarly, Preston developed as an important distributing centre for cheese through lower charges, and local authorities argued that the decline in revenues generated by the trade was largely compensated by the presence of new customers. Farmers who previously sold their cheese at home were now selling in the market where cheese was cheaper and, under the effect of competition, of better quality.[41] Moreover, Preston's ability to undermine the cattle market in Blackburn was premised upon a larger cluster of market incentives that sought to encourage food producers and traders to choose Preston as their destination. Charges upon the selling of pigs, the slaughtering of beasts, sheep and calves, and carts of vegetables in the early 1890s were 33 percent to 50 percent less than the maximum tolls and dues authorised by the Preston Corporation Markets Act of 1861.[42]

Everywhere, then, the lesson was clear. As Schmiechen and Carls rightly argue: 'towns with the best market facilities had the largest, most varied, and cheapest food supplies.'[43] High volume, quick turnover, lower rents and overheads, and a certain degree of bargaining together produced a distributive environment conducive to cheap food. In

[40] RCMRT, Vol. 4, QQ. 131-3, 140-1 (Gray, Motum and Ellis)
[41] RCMRT, Vol. 9, Q. 14,456 (Birley).
[42] RCMRT, Vol. 9, Q. 14,458 (Birley).
[43] Schmiechen and Carls, *The British Market Hall*, p. 134.

Leeds, for example, the combination of modern infrastructures, competitive market policies, and the practice of letting wholesale dealers sell by retail meant 'that the prices of poultry, vegetables, and game would be 25 percent cheaper in the market than in the shops.'[44] Similarly, in Bradford, fish and meat, and to a lesser extent vegetables, bought in the market were cheaper than in the shops in part because the largest fish dealers and wholesale meat traders were tenants in the retail market.[45] Food prices in the market in Bacup were also lower than those in shops, and thanks to the wholesale market in Stockton, food goods were both cheaper and of the best quality.[46] As town councilor W. Smith and town clerk Hill Motum from Newcastle put it:

> (*Mr Councillor Smith.*) Vegetables sold in the market since we have added the wholesale trade would be fully 20 per cent cheaper than they could be got for in shops. The prices ruling in the market have brought down the price of vegetables outside. We get a large quantity of vegetables from the Midland Counties now, a great quantity come even from Covent Garden according to the supply. Telegrams are going to and fro, and if better prices can be got here for vegetables they are sent here. As to the butchers' meat, probably the price of the best butchers' meat would be much about the same in the market and in the shops; but on Saturday night ordinary butchers' meat would be sold perhaps 15 to 20 per cent cheaper in the market than in the shops.

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[44] RCMRT, Vol. 4, Q. 6695 (Hardwick).
[45] RCMRT, Vol. 4, QQ. 5018-20, 5141-4 (McGowen and Dunwell).
[46] RCMRT, Vol. 9, Q. 13,941 (Heyworth); RCMRT, Vol. 4, p. 358.

> (*Mr Motum.*) The providing of increased market accommodation for fruit, vegetables, and fish has had the effect of lowering the price for those commodities in Newcastle. [...] There is a much larger supply in the markets and the shops, and a better supply both of fish and fruit and vegetables. You get vegetables cheaper in the vegetable market, a certain class of vegetables fully 50 per cent cheaper.[47]

No doubt, the public market could be, and indeed was, a powerful vector of local and regional integration as well as a strong municipal lever over the control of the quantity, quality and variety of food supplied. Although they might not have put it in those terms, contemporaries understood very well the vital role of public markets in the 'production' of cheap food. Or course, there were still 'pannier market' or 'pitching sales' in the early 1900s, and farmers' wives were still coming in town on market day to sell poultry, eggs, butter, fruit, vegetables and the like. But the trend was unmistakable as professional stallholders and salesmen were gradually substituted to casual sellers. As these different testimonies suggest, the capacity to add the wholesale trade to the town's public markets was an important element in the constitution of a distributive market infrastructure conducive to low prices. This, however, could not have been accomplished without the railway.

[47] RCMRT, Vol. 4, QQ. 565-8 (Gray, Smith and Motum).

The Railway Connection

Beyond physical infrastructure, buildings, bylaws and regulations, however, proper market accommodation was also highly dependent upon the ability to take advantage of railways. The failure to provide for well-situated and sufficient railway accommodations in relation to market activities was a source of constant frustration for the town's inhabitants and commercial class as well as a strong impediment to its growth. In Stockton, for instance, cattle had to be unloaded either at Bridge Street Station or at the goods station at the north end of the town—each half-a-mile distant from the cattle market—before being driven through the town.[48] The same was true of Birmingham. Between 1877 and 1887 the number of beasts exhibited at the cattle market declined from 35,378 to 28,041, calves from 15,616 to 8,185, and sheep from 113,964 to 75,345. The inconvenience of the market, which was situated 'in the very heart of the town' where 'roads are not good and cattle have to be driven or carted to it from the railway stations', was the main cause behind the decline of the market. As Henry Fulford, chairman of the Markets and Fairs Committee, argued:

> in several other towns in the midland counties not so important as Birmingham, for instance Wolverhampton, there are live cattle markets larger and more prosperous than our own, and we have been very anxious to remove our cattle market to a larger site to which we should be able to bring in the railways.[49]

[48] RCMRT, Vol. 4, QQ. 5487-8 (Creasor and Dodds).
[49] RCMRT, Vol. 2, QQ. 6113-4 (Fulford).

Yet, even successful markets could, in the course of their development, become important bottlenecks. Situated outside of the town, yet close to the railway station and private slaughterhouses, the cattle market in Hull flourished rapidly, encouraging growing quantities of cattle from Lincolnshire and Yorkshire to come into it. Its success soon reached its spatial limits, with farmers complaining that they had to send their beasts elsewhere.[50]

Many provincial towns developed considerable trade through the use of railways. By the end of the 1880s, Bradford had two wholesale carcass meat markets provided with abattoirs—one connected to the Great Northern and the other to the Midland—and distributing 'in all directions, a large quantity being sent to London.'[51] Following the 1848 Public Health Act, many towns had introduced controls over slaughterhouses, removing them—often with the cattle market—from the centre of the town and the market place.[52] Such was the case of Blackburn where the railway company had a special siding belonging to the Corporation for the cattle market situated close to the public abattoirs, which, built at the cost of £9,410, were said to be 'very lofty and well ventilated' and always let.[53] Yet, Blackburn, like many other towns, was discovering that railways not only carried the promise of a better food supply. Railways were not objective technological forces, embedded as they were into a complex web of power relations situated at different geographical scale as towns competed against each other over the distribution of food goods. In this respect the well-established cattle markets of

[50] RCMRT, Vol. 4, QQ. 6823-9 (Morley and Leak).
[51] RCMRT, Vol. 4, Q. 4989 (McGowen).
[52] Blackman, 'The Food Supply of an Industrial Town', pp. 85-92; Shaw, 'Changes in consumer demand', pp. 288-9.
[53] RCMRT, Vol. 9, Q. 14,288 (Gaine), p. 491.

Preston and Salford were serious competitors to Blackburn, and indeed seriously undermined its prosperity. Situated at over a mile from the centre of the town, the cattle market in Preston had 'a connexion with the main line of the London and North-western Railway, which has sidings into the market, and the railway company give facilities by trains stopping on market days.'[54] In Salford, the cattle market was of 'very great importance' and "first-rate order" with accommodation for 5,000 cattle and 22,000 sheep and the provision of public slaughterhouses in the market itself.[55]

In 1888 Thomas Matthews and James Allen, market gardeners from Kent trading for the London markets, argued that they often had ploughed in up to 70 acres of vegetables, their price being so low as 'not [to] defray the expenses of collecting them for the market.'[56] Allen recalled that two years earlier he had sent 10 tons of plums to Pink's factory jam in Long Lane, London, 'but when I had delivered them and got my money there was not an halfpenny for me. I sent them to him rather than let them remain and spoil. There were thousands of tons of plums that year that did not pay the expenses of coming to London, but left the sender in debt.'[57] Allen entertained no doubt that market prices were governed by supply and demand, and that accordingly producers were walking a fine line given that customers were generally attracted by sufficiently supplied markets where goods were cheaper. Yet, as both suggested, there was nothing new about this, as the development of railways tended to carry with it heightened competition in the marketplace between increasingly distant producers.

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[54] RCMRT, Vol. 9, p. 512.
[55] RCMRT, Vol. 9, pp. 576, 578, Q. 15,721 (Alderly).
[56] RCMRT, Vol. 2, Q. 1712 (Matthews).
[57] RCMRT, Vol. 2, Q. 1722 (Allen). See also: 'Report from the Select Committee on Railways [hereafter RSCR] (Rates and Fares)', *PP* XIII.1 (1882), Q. 1897 (Craze).

At the same time, the regularity and frequency with which they operated greatly helped to explain the virtual disappearance of fairs across the country and the transformation of their commercial vocation into a recreational one.[58] Regularity, facilities and quantity sounded the death toll of fairs as provisioning institutions, thus increasingly shifting their *raison d'être* towards amusement.

Of course, railways did not simply convey power struggles over the uneven development of markets at the regional and national level, but also contributed to changing the very dynamics of these struggles as they conveyed food goods with rapidly changing physical properties. In spite of its historical importance, then, the cattle market in Salford already exhibited signs of decline by the end of the century, its profitability undermined by the growth of meat imports. As Winstanley put it, 'the retail butchers relied heavily on wholesale butchers there, only a hundred of them retaining licenses for their own slaughterhouses in the city area.'[59]

The organic relationship that existed between the railway as a technology of mass circulation and the reformed market as a site of mass distribution is perhaps nowhere better illustrated than in the case of the Great Eastern Railway (G.E.R.) and the lack of sufficient retail facilities. With very few exceptions, the G.E.R. passed almost wholly through agricultural districts, which sent their products to Manchester, Birmingham, Leeds, Bradford, and other districts beyond Peterborough, with London capturing the lion's share. Although the quantity of potatoes conveyed into London had risen from 16,000 tons in 1869 to 24,000 tons in 1879, the Company's business was increasingly

[58] RCMRT, Vol. 4, Q. 1837 (Mason).
[59] Winstanley, *The shopkeeper's world*, p. 141.

limited by the lack of proper market accommodations.[60] As William Birt, general manager of the Company, said:

> It has been a complaint for very many years amongst many of the most influential men in the Great Eastern district that there is not sufficient market accommodation provided in London; and they have urged whatever facilities the Great Eastern Company may offer them to grow vegetables, roots, and produce of that kind in substitution of cereals will always be of very little use unless far more ready means of disposing of their produce is offered in London and other towns in the way of market accommodation.[61]

But to encourage traffic in its system by charging lower rates on large bulk made absolutely no sense for the G.E.R. unless it could find sufficient outlets for its clients. The Company then invested about £17,500 to open its own market in 1879 in the parish of Stratford, West Ham, adjoining an existing railway station.[62] 'We admit freely', said Birt, 'that our original intention in establishing Stratford Market was to provide a market for rail-borne produce.'[63] The market was so successful that the Company decided to

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[60] RSCR (Rates and Fares), Q. 248 (Birt).
[61] RCMRT, Vol. 2, Q. 2939 (Birt). This passage is instructive for at least two reasons: (1) it suggests the existence of a class of farmers operating at a much larger productive scale than those ones frequenting public markets and therefore capable of taking advantage of economies of scale fostered by railway rates; and (2) it suggests a willingness to shift production from cereals to more perishable goods with higher marketable value.
[62] RSCR (Rates and Fares), Q. 191 (Birt).
[63] RCMRT, Vol. 2, Q. 3117 (Birt).

convert the old passenger station at Bishopsgate into a depot for the sale of vegetables, roots, and fish, which opened in July 1882.

Bishopsgate Market and Stratford Market were of significant importance both for the booming working class community of the East End and the producers in Norfolk, Suffolk, and Bedfordshire. The total weight of potatoes, roots, vegetables and fruits received by rail at the Stratford Market went from 5,000 tons in 1880 to 33,000 tons in 1887, and by 1886 an extra 12,000 tons of foodstuffs was coming by road through 6,184 carts. In 1880, the total weight of vegetables brought to London by the Great Eastern, irrespective of the markets, amounted to 32,000 tons. In 1882, when the Bishopsgate Market opened, the total weight brought jumped up to 52,000 tons and reached 66,000 tons the following year. Bishopsgate Market was however forced to close in January 1884 because it infringed on the market rights of Spitalfields Market, which held by ancient charter the right to sell vegetables, fruit, and market-garden produce.[64] That year the amount of fruit and vegetables brought into London by the G.E.R. only slightly increased to 69,000 tons, and reached 87,000 tons in 1887. For Birt, there was no doubt that if Bishopsgate Market had been kept open, the total weight of rail-borne food commodities to London through the Great Eastern would have been much larger.[65]

Railway depots like these were not uncommon. Both the Great Northern Railway Potato Market at King's Cross and the Midland Railway Vegetable Market were important railway depots in London. In places such as Liverpool and Carlisle, railway goods depots often developed into important markets. Some were formal, like the

[64] RCMRT, Vol. 2, QQ. 3032-7 (Birt).
[65] RCMRT, Vol. 2, QQ. 3022-4, 3108 (Birt).

Lancashire and Yorkshire Railway Company which paid the Corporation of Manchester £1,500 per year to hold an extensive potato and carrot market on its premises in Oldham Road.[66] And while railway depots almost always came as a result of insufficient retail infrastructures, the provision of proper market accommodations could also undermine the *raison d'être* of the former.

> Formerly there used to be [in Birmingham] a considerable amount of market business transacted at the stations, and one of the companies, the London and North-western Railway Company, paid us 100*l.* a year in commutation of toll, but they have now discontinued that payment on the ground that since the borough markets have been made adequate the business formerly transacted at the stations has ceased to be transacted there.[67]

Broadly speaking, it seems fair to say that most informal railway depots tended to be tolerated – and in some cases probably secretly celebrated – by municipal authorities for providing a temporary solution to the lack of market accommodations without encroaching on public finance or increasing the 'burden' of ratepayers. Hull is a case in point. As a result of insufficient public market infrastructures, the Corporation did not intervene in the development of an important informal market in perishable goods at the Paragon Station. In fact, so valuable was the traffic in game, poultry, fish and fruit, that

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[66] John Page, 'The Sources of Supply of the Manchester Fruit and Vegetable Markets', *Journal of the Royal Agricultural Society of England*, Second Series, Vol. 16 (1880), p. 478.
[67] RCMRT, Vol. 2, Q. 6145 (Fulford).

the railway company spent several thousands to improve the station and cover 3,000 yards of space.[68]

As suggested by the case of the G.E.R., the dialectical tension that existed between retailing and the railway as a technology of mass transportation was the mutually reinforcing relationship that brought them to life, along with their ability to generate new production opportunities. The rapid expansion of railways from the mid-century to the eve of the First World War was key to the development of the market gardening industry of Bedfordshire. The average annual tonnage of vegetables sent from the Potton railway station to London rose from 4,146 tons between 1857 and 1860 to 13,325 tons between 1896 and 1905, the station's total export for 1905 reaching 19,184 tons. The county also became known for its production of onions and Brussels sprouts in the mid-1900s, forwarding large quantities of carrots to the Glasgow wholesale market and other northern cities.[69] With the expansion of public markets and railway lines in the 1850s, new potatoes from Yorkshire, which had until then supplied the markets of Leeds, Bradford and other large towns from the county, as well as London, were now daily forwarded in large quantities during the season to Derby, Sheffield, Birmingham, Leicester, and Cheltenham.[70]

The same was true of market-gardeners from Penzance sending great quantities of vegetables such as early potatoes, broccoli, peas, and cucumber to Covent Garden from Hayle to Bristol by steamer, and then from Bristol to London by railway. Yet, within

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[68] RCMRT, Vol. 2, Q. 5107 (Bradnum).
[69] F. Beavington, 'The Development of Market Gardening in Bedfordshire 1799-1939', *The Agricultural History Review*, Vol. 23, No. 1 (1975), pp. 36-7, 40-1.
[70] E.F. Manby, 'Cultivation of Early Potatoes', *Journal of the Royal Agricultural Society of England*, First Series, Vol. 18 (1857), p. 101.

twenty years of the opening of the Great Western Railway (G.W.R.) for through traffic in 1859, market gardening in Cornwall had increased fourfold, and most of the vegetables sent for London and the large towns of the industrial districts of Lancashire and Yorkshire were carried by railway. By the early 1880s West Cornwall forwarded about 18,000 tons of broccoli and 12,000 tons of new potatoes every year to these large towns, with John Page reporting in 1880 that Manchester frequently received 20 tons of broccoli per day from Cornwall.[71]

One of the most significant aspects in the symbiotic relationship between public markets and railways was the gradual expansion of the wholesale trade into existing public retail markets and, especially in large towns, where the constitution of outright wholesale markets was of regional and national importance. Arguably the separation between retail and wholesale functions in most of the towns in Britain remained blurry and, as we have seen, evidence suggests that a wholesaler turning to retail was quite common and in many instances encouraged by the market authorities themselves. Yet, nowhere was the distinction clearer than in the metropolis where the scale at which London's wholesale markets operated defied 'distributional gravity'. As Daniel Tallerman put it, the Central Meat Market 'is not a market at all. A market is a place where producers and consumers may meet and exchange their produce, but into this

[71] 'The London Commissariat', *The Quarterly Review*, Vol. 95 (1854), p. 296; Dodd, *The Food of London*, p. 375; RSCR (Rates and Fares)', QQ. 1762, 1764, 1795-6, 1844 (Craze); Page, 'The Sources of Supply of the Manchester Fruit and Vegetable Markets', p. 476. On the food supply of Manchester, see: William E. Bear, 'The Food Supply of Manchester', Part 1: Vegetable Produce, *Journal of the Royal Agricultural Society of England*, Vol. 8, Third Series (London, 1897), pp. 205-28; William E. Bear, 'The Food Supply of Manchester', Part 2: Animal Produce, *Journal of the Royal Agricultural Society of England*, Vol. 8, Third Series (London, 1897), pp. 490-515; Roger Scola, *Feeding the Victorian city: the food supply of Manchester, 1770-1870* (Manchester, 1992).

market producers cannot enter at all.'[72] Tallerman's anxiety over London's wholesale markets is interesting because it reveals the growing ambiguity over the 'market' as a zone of exchange where consumers and producers met, and its gradual reorganisation, and structural integration within an expanded conception of the market as a process of exchange characterised by a clear spatial dislocation over the more traditional understanding of the market*place*. The concentration of power in a handful of salesmen was indeed an important characteristic of these mammoth wholesale markets, salesmen being 'critical agents in the capitalist system of metropolitan provisioning [providing the] necessary credit to buyers and basic banking facilities to their sellers, something that country producers were less able to do.'[73] In so doing, they bridged the growing distance between the consumer and the producer, consolidating the basis of an emerging, capitalist international food regime. In all fairness, however, the salesmen of the metropolis were only the most extreme version of what was already happening across the realm, as more and more middlemen were occupying the space between farm and fork.[74]

Public markets in Edinburgh and Glasgow also evolved from their old retail function to become chiefly wholesale, supplying a mushrooming class of small-scale retailers scattered across the town as well as in regionally distant markets.[75] Regional economic powerhouses such as Manchester, Liverpool, Leeds, Birmingham, Newcastle and London not only tended to command the bulk of food distributive activities,

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[72] RCMRT, Vol. 2, Q. 2789 (Tallerman). See also: RCMRT, Vol. 2, QQ. 2835 (Tallerman), 3314-5 (Russell).
[73] Colin Smith, 'The Wholesale and Retail Markets of London, 1660-1840', *The Economic History Review*, Vol. 55, No. 1 (2002), p. 43. See also: RCMRT, Vol. 7, QQ. 8984-90 (Little), 9021-4 (Mahony).
[74] Blackman, 'The Food Supply of an Industrial Town', p. 84.
[75] RCMRT, Vol. 7, QQ. 14,176-7 (Harris), QQ. 15,103-4 (Stevenson).

notoriously through the importance of their wholesale markets, but also to reinforce regional patterns of uneven development. About two-thirds of the market produce in Manchester was sent to a variety of towns all over Lancashire, Cheshire and Yorkshire, and evidence shows that Bolton, Oldham and Salford were largely dependent on Manchester for their food supply.[76] Councilor Kirkman from the Bolton Ratepayers' Association complained that because of the town's lack of wholesale market, shopkeepers from Bury, Radcliffe, Ramsbottom, Tottington and Darwen went through Bolton to go to Manchester to get their produce.[77] Of course, especially in smaller towns, it was still possible for consumers to meet direct producers in the public market, though such encounters were increasingly limited to specific branches of the food trade. The farmer-retailer, still a prominent figure in the marketplace in the middle decades of the nineteenth century, had lost its importance by the late 1880s, and was marginal by 1914. Instead, a new army of greengrocers, fishmongers, salesmen, butchers, fruiterers, and other dealers and tradesmen now stood in the growing space between consumers and producers. Undermining previous knowledge and skills, a whole new division of labour was taking place through an emerging capitalist distributive system solidly anchored in reformed pubic markets.

One important outcome of this uneven regional power structure was a differentiated food price matrix advantaging large towns. The geographical irony is well captured in the case of the fish trade in Birmingham: 'we send fish to the sea-side,' said Fulford, before

[76] RCMRT, Vol. 7, QQ. 13,881-2 (Talbot).
[77] RCMRT, Vol. 7, Q. 13,126 (Kirkman).

noting that 'fish is generally cheaper in Birmingham than it is at places where it is caught.'[78] This new reality, as Mayhew suggested, left many contemporaries perplexed.

> Tourists and pleasure-seekers at Brighton, Hastings, and other coast towns, are often puzzled to understand the fact that fish, although caught and landed near at hand, is not cheaper there than in London: nay, it sometimes happens that good fish is not obtainable either at a high price or low. ... It is, in a similar way, a subject of vexation in the salmon districts that the best salmon are so uniformly sent to London as to leave only the secondary specimens for local consumption.[79]

In the villages of Kent, to buy local farmers' produce was often impossible, with the vast majority of fruit and vegetables being sent to London's jam factories and markets.[80] Parallel to the growth of public markets, then, regional infrastructures of distribution developed, both attracting the bulk of the foodstuffs and therefore increasingly central in the ways in which surrounding districts provided for their needs.

Conclusion

In this chapter I have argued that the transformation of the marketplace into a capitalist institution geared towards the efficient distribution and circulation of food was constitutive of the rising bourgeois urban order as well as instrumental to the 'production'

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[78] RCMRT, Vol. 2, Q. 6109 (Fulford).
[79] Henry Mayhew, *London Characters* (London, 1881), p. 334.
[80] Winstanley, *The shopkeeper's world*, p. 208.

of cheap food. Reformist policies, capital investments, economic incentives, and the exploitation of the new opportunities afforded by the railway all sought to control the municipal lever of the town's food supply, though, as we shall see in Chapter 5, economic interests could also be an important brake on the development of public markets. The evolution of the marketplace towards mass food retailing shaped, and was shaped, by the development of the railway as a technology of mass circulation of food goods, thus contributing to the acceleration of distributive capacities and economies of scale.

The reorganisation of the market*place* and its expansion in space through small-scale retailers constituted one of the most important evolutionary adaptations of the retail system in Britain during the nineteenth century. By transporting the place of the market in space, both street sellers and small shopkeepers were instrumental to the constitution of a more resilient and comprehensive system of food distribution capable of bridging the growing distance that existed between the fixed place of public markets on the one hand, and the development of increasingly distant working-class neighbourhoods on the other. It is precisely the fracturing of the market*place* as a site of exchange that prefigures the spatial expansion of the market as a process of exchange through which the place of the market could be continuously recreated. This relationship is beautifully captured in the figure of the street seller, to which we now turn.

4. Walking Contradictions: Costermongers, Hawkers, and Street Sellers

It's only another way of starving.[1]

In spite of its importance to the town's food supply, the marketplace, as a physically delimited space of distribution, showed an extraordinary dynamism during a period of intense and profound social changes. Its transformation over the years did not always go smoothly, however, and the marketplace soon proved to be an important site of conflict between landed interests and a rising capitalist class eager control the municipal lever of power over the food supply in order to lower the value of labour power and thereby lower their costs of production. As we saw, the process of consolidating the marketplace reflected deep spatial tensions. Indeed, the growth of the working class not only tended to reinforce the importance of the public market in the town's food supply, but also to undermine, especially in large towns, the centrality of the marketplace itself. Fundamental to this process of urban development, then, was the spatial reorganisation of distributive infrastructures towards greater flexibility and comprehensiveness through the medium of food retailers capable to follow customers as the urban space developed. Central to the nineteenth century retail revolution, then, was the reorganisation of the marketplace towards wholesaling and the spatial disarticulation of its retail function through new distributive channels which could better serve increasingly dense, complex, and widespread urban environments.

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[1] Mayhew, *London Labour*, p. 9.

Central to this reorganisation of food distribution was the rise of an important class of costermongers, commonly referred to as hawkers, hucksters, pedlars or street sellers. They engaged in an impressive variety of trades ranging from stationary and literature to flowers and matches. Most of them sold eatables and drinkables such as fruit and vegetables, fish, nuts, meat, tea, bread, baked goods, cheese, milk and coffee. The overwhelming majority either carried trays or baskets of goods or rose 'to the dignity of a wheelbarrow', often alternating between dealing from a fixed stand or by doing rounds in the streets.[2] Only 'the most aristocratic' could afford to keep a pony or donkey with a cart.[3] They were fierce competitors, selling food cheaper than anybody else, and therefore performed a vital function reshaping the ways that working class people obtained the necessities of life. Yet, this competitive edge came at a heavy price for the costermongers; almost all lived in chronic poverty and inhabited overcrowded, filthy and dilapidated dwellings. As John Benson has argued, street selling was 'the ploy of immigrants, the unskilled, the unemployed, the old, the sick, the victimised and the injured.'[4] One could also add to this list the 'criminals', those who, having lost their name cannot get work in the labour market again, except as hawkers.[5] At a time when there was no social safety net, except for the 'public charity' of semi-starvation offered by the workhouse, taking to the street was often one's last resort before complete destitution.

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[2] Dodd, *The Food of London*, p. 363.
[3] Rev. W. Rogers, 'On the trade, habits, and education of the street hawkers of London', *Journal of the Society of Arts*, Vol. 5, April 3 (1857), p. 298.
[4] John Benson, *The Penny Capitalists: A study of Nineteenth-century working-class Entrepreneurs* (Dublin, 1983), p. 101. See also: Mayhew, *London Labour*, p. 324.
[5] 'Departmental Committee on the Employment of Children Act, 1903' [hereafter DCECA], Minutes of evidence, *PP* XXVIII.25 (1910), Q. 1608 (Statham).

Kellow Chesney has argued that the costers embodied a fundamental contradiction, representing no capital interest on the one hand, yet playing a vital function as distributors of cheap food on the other.[6] Contrary to Chesney, however, I maintain that the costers were not anachronistic figures in an otherwise increasingly capitalised distributive environment, but very much the product of their time. These castaways of industrial capitalism, though living within its margins, were nonetheless vital to its functioning. In this chapter I argue that costermongers, hawkers and street sellers were *walking contradictions* to the bourgeois order. The wretchedness of their life and the precariousness of their physical and psychological integrity was precisely the basis of their fundamental social and economic function. Indeed, their ability to transfer the full benefits of cheap food directly to the working class through low profit margins went hand in hand with their own chronic poverty. Street hawkers were living testimonies that the 'production' of cheap food was not only dependent upon cheap imports of foodstuffs, as important as this was, but also the result of highly exploitative class relations and contradictions within the working class itself. Their very presence in the street was itself a strong solvent to the bourgeois idea of progress, the bitter irony of an underfed class selling cheap food to the masses.

In order to elaborate these claims, I have divided this chapter into four sections. The first section looks at the growth and social composition of the costermongering class, as well as to the difficulties arising from an occupation whose porous and informal nature tended to escape the administrative net. Building on this I then highlight, in a second

[6] Kellow Chesney, *The Victorian Underworld* (London, 1970), p. 49.

section, the importance of their social and market function and the central role which they played in the distribution of food. In the third section I turn to the containment of this 'threat' to the social order, showing that the importance of their economic function was rooted in their social, political and legal marginalisation. Finally, I use costers as a lens to problematise the social costs of cheap food, exposing the living and working conditions associated with their occupation.

A Growing Tribe

Samuel Johnson's *A Dictionary of the English Language* (1755) defined a 'hawker' as 'One who sells his wares by proclaiming them in the street'. His dictionary did not have an entry for 'costermonger', but referred to 'costard' as a kind of apple, which was said to be 'round and bulky like the head.'[7] In fact, the etymology of the word 'costermonger' comes from a deformation of the word 'costard', and in a subsequent dictionary Johnson refers to the 'costard-monger' or 'coster-monger' as a dealer in apples, that is, as someone selling apples in the streets of London at a time during which the metropolis was surrounded by orchards.[8] We can trace the presence of the coster back in the streets of London at least since the sixteenth century, both Christopher Marlowe' s *Doctor Faustus* and William Shakespeare's *Henry IV* referring to the famous 'coster-monger'.[9]

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[7] Samuel Johnson, *A Dictionary of the English Language*, Vol. 1, Sixth edition (London, 1785[1755]).
[8] Samuel Johnson and John Walker, *Dictionary of the English Language*, Second Edition (London, 1828), p. 162; Samuel Johnson, *Johnson's Dictionary* (Boston, Ma, 1836), p. 82.
[9] Christopher Marlowe, *The Works of Christopher Marlowe*, Vol. 2 (London, 1826) p. 168; A. J. Valpy (ed.), *The Plays and Poems of Shakespeare*, Vol. 7 (London, 1857), p. 160.

This might help to explain why the term 'costermonger' was mainly used in London, while 'hawker' was generally employed outside of the metropolis. The Pedlars' Act of 1871 suggested that the main difference between a pedlar and a hawker was that the former traveled by foot while the latter used a horse or donkey and a cart.[10] The problem, however, is that there is ample evidence of people referring to hawkers travelling by foot as well. To complicate the matter, Henry Weston Blake, costermonger for 20 years in London examined before the Royal Commission on Alien Immigration in 1902, made a spatial distinction between costermongering and hawking. According to him, 'a hawker may be a coster, but a coster may not be a hawker. ... A hawker is a man who hawks from town to town.'[11] Again, there is ample historical evidence to show that many people living and trading exclusively in the town of Manchester or Glasgow were commonly referred to as hawkers. Social and cultural references mattered, and regionalism and habits played their part, too. In order to avoid confusion, I use these different terms in their larger sense of street sellers or itinerant traders, and therefore follow Alexander's inclusive definition of itinerant distribution 'as all retail trading outside fixed shops'.[12]

Between 1817 and 1823 the number of licenses granted to hawkers and pedlars travelling either by foot or by horse rose from 5,030 to 8,128 in England, and decreased from 717 to 342 in Scotland.[13] By 1843 the number for both countries was 5,762 and 467

[10] RCMRT, Vol. 11, p. 60.
[11] 'Royal Commission on Alien Immigration', Vol. 2, *PP* IX.61 (1903), QQ. 7792-3 (Blake).
[12] Alexander, *Retailing in England*, p. 61.
[13] 'An account of the number of licences granted to hawkers and pedlars, 1817-23', *PP* XVIII.225 (1824).

respectively.[14] As David Alexander has argued, not only does the licensing of hawkers between 1820 and 1843 exclude the rapidly growing proportion of those dealing in foodstuffs, exempt as they were from licensing, but also does not even start to capture the chronic evasion of licensing laws, which usually sought to regulate inter-urban trade, typical among urban hawkers.[15] Alexander shows that by 1850 the number of country itinerants – commonly called Cheap Johns – had drastically declined, most probably as a result of the growing obsolescence of fairs and the rise of a comprehensive network of railways capable of providing goods to public markets and fixed shops on a daily and weekly, rather than monthly or seasonal, basis.[16]

By 1841, there were 2,045 'hawkers, hucksters, and pedlars' in London, 1,841 in Lancashire, and 1,849 in Yorkshire, the latter two representing together about one fourth of their total number in England.[17] A decade later they numbered 3,723 in London, 1,979 in Manchester and Salford, 1,566 in Liverpool, 958 in Glasgow, 494 in Leeds, 265 in Newcastle, 545 in South Wales, and 330 in North Wales.[18] As Table 5 indicates, the number of costermongers, hawkers, and street sellers in England and Wales rose from 25,747 in 1851 to 69,347 in 1911, an impressive increase in proportion to the population from one per 696 inhabitants to one per 520 inhabitants. In Scotland, their numbers increased from 4,744 to 6,845 during the same period, with their proportion to the

[14] 'Return of the number of hawkers licensed in England, Ireland and Scotland, 1830-43', *PP* XXXII.377 (1844).
[15] Folio, *The Hawkers and Street Dealers*, p. 13; Alexander, *Retailing in England*, p. 63.
[16] Alexander, *Retailing in England*, p. 84.
[17] Folio, *The Hawkers and Street Dealers*, p. 13. Mayhew, *London Labour*, p. 6.
[18] Census 1851, Table 2, Vol. 1, pp. 10, 14 (London); Table 2, Vol. 2, pp. 648, 652 (Manchester, Salford, and Liverpool), pp. 720, 724 (Leeds), pp. 792, 796 (Newcastle), pp. 834, 838 (South Wales), pp. 840, 844 (North Wales), pp. 1016, 1020 (Glasgow).

population remaining roughly the same at one per 600 until the early 1890s, before surging to one per 696 in 1911.

Table 5 Number of street sellers in England and Wales and Scotland, 1851-1911

	England and Wales		Scotland	
	Number	Per Person	Number	Per Person
1851	25,747	696	4,744	609
1861	37,671	533	5,526	554
1871	49,775	456	-	-
1881	47,111	551	6,202	602
1891	58,919	492	6,446	625
1901	61,339	530	6,200	721
1911	69,437	520	6,845	696

Source: Figures for 1851 for England, Wales, and Scotland: Census of Great Britain, 1851 Table 2, Vol. 1, pp. ccxxii, ccxxvi; Table 2, Vol. 2, pp. 908, 912.
Figures for 1861: (1) for England and Wales: England and Wales 1861, General Report, pp. xxxiii-iv; and (2) for Scotland: Scotland 1861, Vol. 2, pp. 96, 107.
Figures for 1871: (1) for England and Wales: England 1871, Vol. 3, pp. xxxviii, xliv; and (2) for Scotland: Scotland 1871, Vol. 2, p. 468 [see how they classify general dealers or hawkers].
Figures for 1881, 1891, and 1901 for England, Wales, and Scotland: England and Wales and Scotland 1881, 1891 and 1901, Census England of 1901, General report, Appendix A, p. 280.
Figures for 1911: (1) for England and Wales: England and Wales 1911, General Report, pp. 144-5; and (2) for Scotland: Scotland 1911, Vol. 2, p. lxxxvi.
Data on total population to calculate the number of street hawkers per inhabitant are taken from: (1) England and Wales: Census of England and Wales 1911, General Report, p. 21; and (2) for Scotland: Census of Scotland 1911, Vol. 2, p. xxii.

The problem with census returns, however, is that they vastly underestimate the size of the costermongering class. Henry Mayhew, in his well-known survey of London, described the 1851 figure as 'absurdly small', estimating that about 35,000 men, women, and children subsisted in the streets of London on the sale of fish, fruit, and vegetables alone. By 1861 John Hollingshead put the population of street hawkers and street minstrels, including their dependents, at 100,000.[19] Arguably, 1891 census returns for

[19] Mayhew, *London Labour*, p. 6. See also: Hollingshead, *Ragged London*, p. 28.

London estimating the number of costers and street sellers at 11,992 do not make much sense, nor do the 5,290 barrows and movable stalls reported by the London County Council (LCC) in 1893.[20] Building on Charles Booth's work, Arthur Sherwell estimated the number of costers or street-seller heads of families in the mid-1890s in the Strand, Soho, and St. Giles' districts to be 771, representing about 3.2 percent of the 24,094 costers in London. But as Sherwell carefully notes, this number refers exclusively to families in which the heads are engaged in such trade, and therefore excludes both women and children and those costers who are not heads of families.[21] Yet, even Sherwell's figures seem conservative.

Examined before the Royal Commission on London Traffic in 1904, Captain John William Nott Bower, Commissioner of the City of London Police, reported that as many as 605 wheelbarrows per day were counted between 12 noon and 12.20 p.m. in the City during the last week of September 1903.[22] While it is doubtful that a 20 minutes census of the number of wheelbarrows used by costermongers in the City may be taken as a comprehensive survey of the population engaged in street selling, perhaps more revealing is all that this census excludes. For while it does not account for those trading either from a basket or from a stall or cart, it is also limited to the City whose population was declining during the nineteenth century as people moved outwards to London's suburbs, and therefore excludes all the parishes and places within the jurisdiction of the

[20] Harold Hardy, 'Costers and Street Sellers', in *Life and Labour of the People in London*, Volume 7, ed. Charles Booth (London, 1896), pp. 259, 262-3.
[21] Sherwell, *Life in West London*, pp. 60-1.
[22] 'Royal Commission on London Traffic', Vol. 3, *PP* XLI (1906), Appendix No. 45, Return 3 and 4, pp. 512-3 (Nott Bower).

Metropolitan Board of Works, which became the London County Council in 1889 through the Local Government Act of 1888.

There are at least three reasons to explain such a discrepancy between government returns and the actual size of the costermongering class. First, most hawkers were illiterate and could not (or simply would not) complete the census returns. Many did not know their age, and 'not one in twenty of the costermongers', Mayhew argued, 'troubled themselves to fill up the census returns'.[23] While literacy rates increased from the 1870s onwards as a result of the Elementary Education Act of 1870 in England and Wales and the Education (Scotland) Act of 1872, the coster's distrust of any forms of authority, especially the much hated police, was sufficient to cast serious doubts on the nature and purpose of the census returns, and to disregard such inquiries as either useless formality, which, while inappropriately intrusive, would not change anything about their social condition. Moreover, it is arguable that the social stigma associated with the costermongering class must have been an important hindrance to properly filling out the census returns. Bankrupt shopkeepers or skilled workers forced to take to the street because of illnesses, for instance, would not have accepted their new social status so easily.

A second reason comes from the fact that throughout the period under review there was always an important proportion of country people coming into town to hawk their products in the streets and whose presence was generally greatly appreciated by town inhabitants both for the cheapness of their articles and the convenience of having

[23] Mayhew, *London Labour*, p. 6. See also: Greenwood, 'Food Committee', p. 94; Phillips, 'The evolution of markets and shops in Britain', p. 54.

the goods delivered at their door. Transformations in the sourcing of the public markets via the intermediary of the salesman and the use of the railway undoubtedly encouraged large-scale producers, thus contributing to the marginalisation of small farmers from the marketplace itself. In this context, hawking their produce onto the streets was probably an important strategy of reproduction for many of them, not least because they lowered their production costs by avoiding market tolls. And while their presence was probably more important in smaller towns, farmers taking to the street were not uncommon in large urban centres, especially those situated within agricultural districts such as Hull, Birmingham, and Exeter, where a great deal of fruit, vegetables, milk, cheese, and the like were sold.[24] For instance, greengrocer William Pepler complained about 'hundreds of horses and carts coming into Bristol from the country daily with greengrocery, and they hawk the streets of Bristol and go from door to door and sell their goods.'[25] And though this was most likely a rapidly declining trade, it was still possible to find in the early 1890s farmers killing their own stock and hawking butchers' meat in the streets without paying a license, which, in Burnley, was considered a great offense by the city butchers.[26]

Finally, and perhaps most importantly, many labourers temporarily took to the street in time of economic hardship. Costermongering and hawking were 'residual

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[24] RCMRT, Vol. 4, Q. 6844 (Bradnum); RCMRT, Vol. 3, *PP* LIV.1 (1888), Q. 10,934 (Pengelly). On the other hand, in places such as Hungerford where many of the town's inhabitants 'got very good gardens', the number of market gardeners driving their carts from neighbouring villages was more limited. See also: RCMRT, Vol. 4, Q. 3178 (Taylor), Q. 3291 (Major)
[25] RCMRT, Vol. 3, Q. 15,312 (Pepler).
[26] RCMRT, Vol. 9, Q. 13,222-6 (Waddington).

occupations for casual workers',[27] and often constituted the last occupational refuge before complete destitution, homelessness, and the much-feared workhouse. Unemployment and underemployment, economic fluctuations, trade cycles, and seasonal employment forced many dockers, builders, bricklayers, brickmakers, and casual labourers into hawking in order to stave off hunger or simply avoid starvation. Of course, the necessity of taking to the streets would very much depend on one's capacity to earn enough in 'normal' times to save for periods of unemployment or illness. While workers in virtually every trade experienced periods of adversity, the social composition of the labour market between skilled, unskilled, and casual workers greatly influenced the extent to which one could shield oneself from market fluctuations, especially during winter months and the seasonal interruption of the supply of raw materials. As Stedman Jones put it, 'undertakers took on extra workers at the beginning of November to cope with the extra supply of corpses.'[28]

Of interest here is the extent to which an important proportion of the costermongering class constantly escaped the census net. Neither the farmers coming into town nor the labourers temporarily taking to the streets to make ends meet were likely to describe themselves as street sellers at the time of the census. They saw themselves first and foremost as farmers, dockers and bricklayers, and it is arguable that most of them would have despised being associated with street hawking, a sure reference to the lowest order of society. Although for different reasons, not even those engaged in the trade on a

[27] Gareth Stedman Jones, *Outcast London: a study in the relationship between classes in Victorian society* (Oxford, 1971), p. 61.
[28] Stedman Jones, *Outcast London*, p. 37.

regular basis could be counted on to fill up the census returns, and child labour must also have largely escaped official census. Official returns regarding the number of people engaged or dependent upon street selling should therefore be regarded with precaution. At the very best, they represent a rough estimate of the 'permanent core' of full-time street sellers.[29] But this is probably as far as one can go, and it does not seem unjustified given the very nature of the occupation itself to estimate the number of those permanently engaged in it to be at least twice as many the official returns.

London outnumbered provincial towns with regard to the importance of its costermongering class, for which there was 'no parallel in any other city'.[30] To a great extent, this was linked to the lack of retail markets in the metropolis. Between 1800 and 1840, population per market increased from 39,900 to 114,600, while the number of retail markets declined from 24 to 17 during the same period.[31] Early on, then, costers fulfilled a vital function in people's access to food. 'The commerce of the costermongers of London is accepted by the mass of Londoners as a metropolitan institution of primary importance. The "coster" has his place, in song and story, in verse and picture, as one of London's best-known characters. He is of the people; for the people.'[32] Informal markets like Newport Market, Oxford Market, Paddington Market, the New Cut, Whitecross Street, Whitechapel, and Mile End Road mushroomed during the second half of the

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[29] Alexander, *Retailing in England*, p. 62; Benson, *The Penny Capitalists*, p. 103.
[30] Hardy, 'Costers and Street Sellers', p. 260.
[31] Smith, 'The Wholesale and Retail Markets of London', p. 45. See also: Sidney Webb, *The Scandal of London's Markets*, Fabian Tract No. 36 (London, 1891).
[32] James William Sullivan, *Markets for the People: The Consumer's Part* (New York, 1913), p. 224. For a comic song figuring a costermonger with a hat decorated with green cabbage leaves as emblematic of the weeping willow, see: Charles Hindley (ed.), *The Life and Adventures of A Cheap Jack* (London, 1876), pp. 285-6.

nineteenth century, rising from 37 in the early 1850s to 112 (with 5,292 stalls) in 1893. By 1901, the 110 'unauthorised' markets – one contained no less than 7,055 stalls, 4,529 of which (64 percent) were for perishable goods, thus showing the vital importance of the costers as distributors of cheap food in the metropolis. (A. Spencer, chief officer of the Public Control Department of the LCC, estimated the number of illegal street markets at 130.) Chrisp Street Market, located in Poplar, was estimated to serve up to four thousands people in 1888, and a special report to the LCC in 1893 concluded that at least thirteen of these informal markets were important enough to be considered retail markets in the ordinary acceptation of the term.[33] 'The unauthorized street markets of London', the same report concluded, 'undoubtedly fulfill a most useful purpose. They are practically confined to poor and crowded neighbourhoods, and are largely the means by which the surplus produce remaining unsold in the authorized markets is distributed amongst the poorer classes.'[34]

In spite of the immense distance separating them, the symbiotic relationships between small-scale retail costermongers and large-scale wholesale public markets was visible through the existence of a class of 'semi-wholesalers' known as 'higglers' (fruit and vegetable) or 'bummarees' (fish). Large salesmen handling great quantities of foodstuffs dealt almost exclusively wholesale, and were largely uninterested in dealing with small-scale retailers. 'A wholesale dealer would not divide his packages,' one costermonger explained, 'but a higgler would buy from him, and he would sell a

[33] RCMRT, Vol. 2, Q. 3816 (Wood); Mayhew, *London Labour*, p. 13; Hardy, 'Costers and Street Sellers', p. 260; Sullivan, *Markets for the People*, pp. 211-2; 'Inter-Departmental Committee on Employment of School Children' [hereafter IDCESC], Minutes of evidence, *PP* XXV.287 (1902), QQ. 4135 (Spencer).
[34] Hardy, 'Costers and Street Sellers', p. 264.

customer a portion of the package, of course, at a slightly advanced price.'[35] As George Shave, costermonger dealing from Covent Garden, complained:

> the higglers stand round, and before we get to the market, it might be at 4 o'clock, they see how the things are being sold from the vans, and they purchase a lot, perhaps £10 or £20 worth, and they will put a price on them; and you shall walk all round and you cannot get the things so cheap, from their buying them from the vans, as you would otherwise do. They put a price on them, and you cannot buy them under.[36]

The same was true in the fish trade where bummarees bought 'largely from the leaders in the trade, and then sell again to the peripatetics—the street dealers. They are not fishmongers; they buy and sell again during the same day, and in the market itself.'[37] The fish were packed in loose ice in boxes technically known as 'trunks' averaging 90 lbs., and as Charles Edward Le Poer Trench, clerk and superintendent of Billingsgate Market, explained, the main function of this 'wholesale-retail man' was to break the parcels in order to make the fish accessible to costermongers.[38]

As one might suspect, the conditions of existence of these 'speculative dealers' largely depended upon 'the singular precariousness of the supply', especially their ability

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[35] RCMRT, Vol. 2, Q. 1994 (Hanman).
[36] RCMRT, Vol. 2, Q. 3663 (Shave). According to the RCMRT, higglers were also said to exist in Dover, Newcastle, Kidderminster, Aylesbury, and Canterbury.
[37] Mayhew, *London characters*, p. 341.
[38] RCMRT, Vol. 2, Q. 1884 (Le Poer Trench). See also: Dodd, *The Food of London*, p. 349; RCMRT Vol. 2, Q. 525 (Goldney).

to control the market supply by enacting planned scarcity.[39] This might help to explain why they were present in Billingsgate Market, Covent Garden, and Farringdon Fruit and Vegetable Market, where powerful salesmen operated, and absent from Shadwell Fish Market and Spitalfields Market where wholesale traders did not control the supply of goods.[40] Understandably, many costermongers saw these higglers and bummarees as a parasitic class of dealers standing between them and the market. Yet, their mediating role and function remained central as they reconciled two seemingly contradictory yet deeply complementary processes of the system of food distribution: the formation and development of large-scale distribution facilities through a series of mammoth wholesale markets on the one hand, and the resilience and daily importance of small-scale retailers amidst booming urbanisation and suburbanisation on the other.

Of course, hawking activities were not limited to London. In Manchester, Leeds, Newcastle and Glasgow, for instance, the rise of urban and suburban density also triggered the transformation of public markets into regional wholesale distributive centres, which in turn created the space for the costermongering class to grow. According to the findings of the RCMRT, there were over 200 hawkers in Bolton, while they numbered 97 in Ashton-under-Lyne. They generally bought wholesale in Manchester before selling from door to door, a practice as appreciated by town dwellers as criticised by market stallholders and shopkeepers alike.[41] Since we know that the Corporation of Huddersfield charged between 2*s.* 6*d.* and 10*s.* a year for a license and that revenues from

[39] Dodd, *The Food of London*, p. 349.
[40] RCMRT, Vol. 2, QQ. 3805-6 (Wood), 3540-58 (Denton).
[41] RCMRT, Vol. 7, Q. 13,126 (Kirkman); RCMRT, Vol. 9, QQ. 13,693 (Radcliffe), 13,840-2 (Walker).

them totalised £117 in 1887, we can estimate the number of hawkers as somewhere in between 234 and 936, most probably at the higher end of the spectrum.[42] Halifax had 204 licensed hawkers in 1887, and the latter played an important role in the distribution of food in Rochdale where they even formed an association that represented 36 of them, though 'a great many more' did not belong to it.[43] In Chorley the 'problem' of street hawkers was particularly acute, for while the market days were on Tuesdays and Saturdays, hawkers roamed in the streets every day, thus seriously depriving market stallholders from their custom.[44] Up until 1914 Lancashire and the West Riding of Yorkshire continued to have high numbers of itinerant traders relative to their populations.

There was also clear concentration in the counties along the south and east coasts.[45] Stallholders in the Eastgate Market in Gloucester complained about hawkers coming from Cheltenham, and as Mr Buckley, greengrocer and market stallholder, said, hawkers 'do a lot of harm to the people in the market, because we have to pay for the stall, and they go from house to house to sell and pay nothing' – a sentiment surely shared by others as well.[46] As in Gloucester, the market in Torquay was not very popular, as hawkers supplied the town with an impressive range of food goods such as fish, meat, poultry, fruit, butter, vegetables, and eggs brought from Dartmouth, Newton, Exeter, and

[42] RCMRT, Vol. 4, QQ. 3607 (Potts), 3644 (Dugdale).
[43] RCMRT, Vol. 4, Q. 4194 (Walton and Culpan); RCMRT, Vol. 2, QQ. 5851-2 (Tolon).
[44] RCMRT, Vol. 9, p. 312.
[45] Phillips, 'The evolution of markets and shops in Britain', pp. 54-6.
[46] RCMRT, Vol. 3, Q 13,581 (Buckley), Q. 13,586 (Simpson).

Totnes. In fact, their importance was such that hawking tolls were the main source of income of the private company holding the market rights.[47]

Biting the Hand that Feeds You

In her lecture at the Economic Club on January 10th, 1893, Helen Dendy argued that 'the industrial residuum' to which the costermongers belonged was 'economically dead' and had 'no real use'. Too low to grab the civilised and benevolent capitalist hand, Dendy concluded that 'the best that can really be hoped for it is that it should gradually wear itself away, or in the coming generation be reabsorbed into the industrial life on which it is at present a mere parasite.'[48] Besides her despicable contempt for the 'residuum', which exposed as much her anxiety over the resilience of poverty amidst plenty as it revealed the theoretical vacuity of her bourgeois conception of the 'economic man', nothing could be further from the truth than her characterisation of the costermongers as 'economically dead'. Their importance during the second half of the nineteenth century did not fade away with the advent of the new century, and by 1913 James William Sullivan could still write that:

> Working-class London in general, and much of middle-class London as well, buy the bulk of their perishable necessaries from ambulant pushcart vendors or at the open-air markets. The system is at once the most ancient and the most modern. It is

[47] RCMRT, Vol. 3, Q. 11,226 (Gibbs).
[48] Helen Dendy, 'The Industrial Residuum', *The Economic Journal*, Vol. 3, No. 12 (1893), pp. 601, 606-7, 616.

> the cheapest of all systems—efficient, natural, democratic, rightfully communistic. It often gives the masses double rations.[49]

As Sullivan suggests, the coster's custom was not limited to the working class, as important as it was. Felix Folio had already noted in the 1850s that middle class housewives buying cheaply the necessities of life from hawkers in the industrial towns of the north was not so uncommon a scene as one might believe, and in London many costers trading from Covent Garden supplied the well-to-do middle class of the West End.[50] Towards the end of the 1870s the town of Bedford abolished tolls upon hawking activities entirely, arguing that the loss in municipal revenues was largely compensated for by the greater availability of cheaper food for its inhabitants, ratepayers themselves taking advantage of these bargains.[51] In Exeter, too, lower middle class people preferred to have their produce delivered at their doors, thus benefitting from an impressive list of items including butter, poultry, meat, fish, fruit and vegetables, eggs, herbs, and roots, much to the displeasure of market stallholders.[52] As town clerk Bartholomew C. Gidley put it, if 'it should be attempted to do away with selling from door to door, it would occasion the greatest possible inconvenience to a very large class of householders, because the city spreads a great way, about 2.5 miles in one direction, so that a great deal of hawking must be done.'[53]

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[49] Sullivan, *Markets for the People*, pp. 227-8.
[50] Folio, *The Hawkers and Street*, p. 32; RCMRT, Vol. 2, Q. 3711 (Shave).
[51] RCMRT, Vol. 4, Q. 2882 (Carter).
[52] RCMRT, Vol. 3, QQ. 10,956, 11,018-9, 11,045 (Shorto).
[53] RCMRT, Vol. 3, QQ. 11,053 (Shorto), 11,074 (Cornish), 11,086 (Cane).

Table 6 Proportion of fish from Billingsgate sold by costermongers, *c.*1850

Fish	Number	Weight (lbs.)	Proportion sold by Costermongers
Salmon and Salmon Trout	406,000	3,480,000	One-twentieth
Live Cod	400,000	4,000,000	One-fourth
Soles	97,520,000	26,880,000	One-fifteenth
Whiting	17,920,000	6,720,000	One-fourth
Plaice	33,600,000	33,600,000	Seven-eighths
Mackerel	23,520,000	23,520,000	Two-thirds
Fresh Herrings (per bar)	175,000,000	42,000,000	One-half
Fresh Herrings (in bulk)	1,050,000,000	252,000,000	Three-fourths
Dried Salt Cod	1,600,000	8,000,000	One-tenth
Bloaters	147,000,000	10,600,000	One-fourth
Oysters	495,896,000	-	One-fourth

Source: Mayhew, *London Labour*, p. 63.

Of course, it was the working class who benefitted the most from these cheap bargains. To be sure, there were no fixed rules over which classes frequented the costers, and countless variations existed. For one, working poor and casual workers, arguably the ones who would have benefitted the most from cheap food, were often tied to the corner shop through debt. Costers were, as a rule, simply too poor themselves to allow credit, though, obviously, exceptions existed.[54] But there is no doubt that costers played a vital role in the household economy. 'Out of this ingenious industry [the slimy leaves of the waste trimmings],' James Greenwood wrote in the early 1870s, 'is evolved those wonderfully bountiful "penn'orths" of cabbage, for which, in the flare of gas and marketing hubbub, poor mothers, with large families, seek so eagerly, in order to eke out the scrap of meat that constitutes the staple of Sunday's dinner.'[55] Skilled workers, on the other hand, anxious to retain social status and respectability, could choose to bring their

[54] Juliet Stuart Poyntz, 'Introduction: Seasonal Trades,' in *Seasonal Trades*, ed. Sidney Webb and Arnold Freeman (London, 1912), pp. 50-1.
[55] James Greenwood, *In Strange Company: Being the Experiences of a Roving Correspondent* (London, 1883[1873]), p. 154.

custom to the shop instead, and in places where a strong culture of mutuality existed, the politics of consumption was likely to tie an important part of the household budget to the co-op. Yet, most co-operative societies did not carry perishables, thus leaving a potentially important custom to the costermongers who 'specialised' in such articles. For the bulk of the working class earning between 21*s.* and 30*s.* a week, however, the coster was undoubtedly an important element in the rise of living standards. Contrary to the shopkeeper who often charged up to 150 percent on the articles bought, the coster was satisfied with very tiny profits.[56] As John Denton, costermonger at Spitalfields, put it:

> We have to buy cheap, because if we did not buy cheap we could not sell cheap, and if we could not sell cheap we cold not sell a quantity, and if we did not sell a quantity it would not pay us. ... [B]esides, it is not only me, but everybody the same as myself sells wonderful cheap, and sells a good deal of stuff to get a little profit, and the people come from far and near to this place [Chrisp Street].[57]

Attending the informal Whitecross Street Market on a Saturday night of November, 1868, James Greenwood counted no less than 1,300 people coming out of the street between eight and nine o'clock, most of which were 'of the decent working order.'[58] The same was true about informal markets outside of London. Careful housewives hunting for

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[56] RCMRT, Vol. 2, QQ. 1713-4 (Matthews). See also: Charles Dickens, Jr, *Dickens's dictionary of London, 1879: An unconventional handbook* (London, 1882), p. 20.
[57] RCMRT, Vol. 2, QQ. 3562, 3571 (Denton). See also: Hardy, 'Costers and Street Sellers', p. 268.
[58] Greenwood, 'Food Committee', p. 92.

bargains could count on the coster as an important ally in their quest to make money go further.

Besides, it was not only the working class and middle class people who enjoyed the coster's business. Whilst local authorities were all too aware of its vital importance in the town's food supply, market authorities praised the coster's ability to clear markets. Tables 6 and 7 demonstrate the extent to which the costers were central in the distribution of food to the population of London in 1851. Forty years later their importance had not diminished. George Packer, secretary to the London Fish Trade Association, referred to them as 'the best customers in Billingsgate Market, certainly for the commoner kinds of fish.'[59] Mayhew vividly captured their importance for the fish trade in the early 1880s: 'the liveliest scene at Billingsgate, the fun of the affair, is when the costermongers come. This may be at seven o'clock or so, after the "dons" have taken off the fish that command a high price... and they will flock down thither literally by thousands.'[60] The same was true of the fruit and vegetable trade. Robert Horner, owner of the Spitalfields Market, said before the RCMRT that 'costermongers are very useful people in clearing the market... They are a great boon to market gardeners and to myself, because they come and take away the refuse.'[61] G. Prior Goldney, the City Remembrancer, also recognised the value of their labour in the distribution of cheap food, noting that if, from bad weather, fish is scarce in the market, the costermonger 'buys a quantity of figs, or oranges, or apples, or nuts, or he goes across London Bridge and gets to the Borough

[59] RCMRT, Vol. 2, Q. 1853 (Packer).
[60] Mayhew, *London characters*, p. 340.
[61] RCMRT, Vol. 2, QQ. 1607-8 (Horner).

market and buys a quantity of green fruit; but he buys something else, and away he goes to supply his customers in the other parts of London.'[62]

Table 7 Proportion of home-grown fruit and vegetables from the metropolitan wholesale markets sold by costermongers, *c.*1850

Fruit and Vegetables	Covent Garden	Borough	Spitalfields	Total	Proportion sold by Costermongers
Apples (bushels)	360,000	25,000	250,000	686,000	One-half
Pears (bushels)	230,000	10,000	83,000	353,000	One-half
Gooseberries (bushels)	140,000	26,200	91,500	276,700	Three-fourths
Strawberries (pottles)	638,000	330,000	396,000	1,527,500	One-half
Potatoes (lbs.)	161,280,000	48,384,000	64,512,000	310,096,000	One-fifteenth
Cabbages (plants)	33,600,000	19,200,000	12,000,000	89,672,000	One-third
Turnips (roots)	18,300,000	4,800,000	4,800,000	32,648,000	One-tenth
Peas (bushels)	270,000	50,000	100,000	438,000	One-half
Onions (bushels)	500,000	398,000	400,000	1,489,600	One-third

Source: Mayhew, *London Labour*, p. 80.

Policing the 'Dark Continent'

When William Dodd wrote in 1847 that 'it may be safely conjectured that the British public know more of the social misery of savage nations, than they do of their own poor',[63] he not only captured the ruling class's mounting feeling of insecurity and danger arising from 'the dangerous classes' at home, but also made an important racial connection between 'the social misery of savage nations' and the social misery of the working poor at home. For the 'respectable society', slums and poverty-stricken neighbourhood were dangerous places where it was preferable not to venture. That the ruling class did not easily identify the obvious paradox of it being afraid of its own

[62] RCMRT, Vol. 2, Q. 525 (Goldney). See Dodd, *The Food of London*, p. 364; Thomson and Smith, *Street Life in London*, p. 59; Mayhew, *London characters*, p. 340.
[63] Dodd, *The Laboring Classes of England*, p. 29.

creation is not so surprising. Rather, it preferred to portray the outcasts of bourgeois civilisation as an external, disconnected and unrelated threat to the body polity.[64] The externalisation of capital's contradiction was indeed essential to the legitimacy of the bourgeois order itself, and it is indeed remarkable, as Asa Briggs has pointed out, 'how often the exploration of the unknown city was compared with the exploration of Africa and Asia.'[65] James Greenwood's chapter 'A Mission Among City Savages' in his *In Strange Company* illustrates well the extent to which the colonial present also reached at the very core of Britain's internal geography.[66] From religious 'missions' to the meteoric rise in the number of journalists and other social commentators exploring the maze of poverty across Britain, the metaphor of a dark underworld captured both the anxiety and contempt of a ruling class over the 'masses'.

Street sellers belonged to the 'dark continent' as surely as Prometheus was chained to a rock. Charles Booth referred to even the costers' children as 'dirty, filthy, rough, and savage.'[67] As a class they were considered unruly and prone to gratify bodily pleasures over intellectual achievements. The lower economic status of the costermongering class would be hard to understand in abstraction from its racialised conceptualisation by contemporaries. Both went hand in hand, reinforcing further the need to police the borders of the bourgeois sanitised world against the threat of corruption and degeneration from below. Praised by market authorities and often recognised as a

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[64] David Taylor, 'Beyond the Bounds of Respectable Society: The "Dangerous Classes" in Victorian and Edwardian England', in *Criminal Conversations: Victorian Crimes, Social Panic, and Moral Outrage*, ed. Judith Rowbotham and Kim Stevenson (Columbus, 2005), pp. 3-22.
[65] Asa Briggs, *Victorian Cities* (London, 1990[1963]), p. 62.
[66] Greenwood, *In Strange Company*, pp. 18-34.
[67] Charles Booth, *Life and Labour of the People in London*, Vol. 4 (London, 1902), p. 92.

vital link in the food distribution chain, hard-working street sellers were constantly reminded of the precariousness of their social position.

Constantly harassed by the police to keep them on the move and legally squared by a growing juridical apparatus, they lived under the perennial threat of having their goods confiscated or being taken in custody. At a meeting held in December 1860, street vendors complained that they

> were subjected to fine and imprisonment, and were told when they were following their occupation that they were violating the law. The great objection made against them was that they obstructed the thoroughfares, but if that was an objection it applied equally to others. Were it not for the street vendors, the goods which they circulated would not be brought to London at all.[68]

The clarification of their legal status came in 1867 with the Metropolitan Streets Act. Later that year Section six of the Act, which prohibited the deposit of goods in the streets, was amended so that it 'shall not apply to costermongers, street hawkers, or itinerant traders, so long as they carry on their business in accordance with the regulations from time to time made by the Commissioner of Police, with the approval of the Secretary of State'.[69] The Act, as amended, reflected the core tension animating these walking

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[68] Hollingshead, *Ragged London*, pp. 28-9.
[69] Carrol Romer, *The Metropolitan Traffic Manual, containing the Law relating to Road, River and Air Traffic in London and elsewhere* (London, 1922), p. 36.

contradictions, at once recognising that their ability to sell cheap food was based on maintaining their chronic state of insecurity by policing their lesser movements.

By the end of 1869, regulations were in place, stipulating that no barrow, cart or stall shall exceed nine feet in length by three in width. Most importantly, regulations stipulated that street sellers were 'liable to be removed from any street or public way in which they create an obstruction to the traffic, or where they are an annoyance to the inhabitants.'[70] In other words, while the spirit of the law was that none of them would be interfered with as long as they followed the regulations, the latter's effect was to give the police full power over them, and evidence suggests that what constituted 'obstruction' tended to be interpreted liberally. Even the LCC, which acknowledged the importance of informal markets, saw them 'as a source of serious nuisance.' As Hardy perceptively wrote:

> To whom are these markets a nuisance? And the answer must be—Not to those who frequent them, for they do so voluntarily; not to those who have shops in these streets, for their trade is increased; not to the general inhabitants of the neighbourhood, who are the people whose wants are served. ... In truth, the nuisance is theoretic rather than practical, an offence against a rather visionary idea of civic order.[71]

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[70] Romer, *The Metropolitan Traffic Manual*, p. 37.
[71] Hardy, 'Costers and Street Sellers', p. 264.

As Chesney has argued, costers belonged to what Victorians called the *dangerous classes* 'whose very manner of living seemed a challenge to ordered society and the tissue of laws, moralities and taboos holding it together.'[72] The presence of the coster in the streets was itself an important reminder that the 'civic order' to which Victorians aspired as well as their ideals of 'progress' and 'improvement' were ultimately founded upon an explicit contradiction, visible as it was in the social, economic, cultural, and political marginalisation of the costermongering class. In other words, it was precisely the costers' lack of bourgeois 'respectability' that made them both socially valuable as distributors of cheap food and the subjects of constant repression.[73]

London was not alone in policing the lives of the costers. With the slow transfer of legal responsibilities and political control to local authorities, municipal governments became very active in regulating food distribution. The Public Health Act of 1847 gave municipal boroughs the power to legislate street selling, a legal capacity which many influential grocers and tradesmen were not slow to implement. 'By 1886, two-thirds of Britain's principal municipal boroughs had, in theory at least, prohibited marketing on the street, except for the occasional designated locations'.[74] Notwithstanding legal restrictions, it is obvious that the gap between theory and practice was immense; it seems fairly obvious that given the role of street hawkers over the distribution of food most public authorities turned a blind eye. Large provincial towns with important public markets generally recognised the complementary role played by hawkers in the

[72] Chesney, *The Victorian Underworld*, p. 38.
[73] 'Royal Commission on London Traffic', Vol. 2, *PP* XI (1906), QQ. 14,948-53 (Nott Bower).
[74] Schmiechen and Carls, *The British Market Hall*, p. 27.

distribution of food. In Newcastle, Edinburgh, Leeds, Hull, Liverpool, Glasgow, Birmingham, and Manchester, hawkers, licensed or not, did not pay any charges. Even in smaller towns like Stockton, Preston, and Sheffield, where public markets were very popular, no charge was made as long as they stayed outside the precinct of the market.[75] Where hawkers worked under a system of licenses such as in Halifax, Huddersfield and Bradford, complaints against hawkers, especially by stallholders in the market, were almost nonexistent.[76]

As in London, however, this extensive legal apparatus was the principal vector of control over this segment of the population as well as its effective, legal marginalisation, as it offered a flexible political tool that could be used either assiduously or with laxity, according to the balance of power at the municipal level between shopkeepers, ratepayers, and the working class. But even where costers were popular, police harassment was frequent, as in the slum of Salford. As Roberts recalls:

> Of 304 women imprisoned in Strangeways between 4 August and 4 September 1914, forty-three were 'chars', thirty-two 'laundresses' (in court every washerwoman called herself a laundress), twenty-four 'servants' and thirty-seven 'hawkers'. At regular intervals the police made drives against 'illegal street traders'... Pedlars without license, like the hawker with his hand-cart, they haunted the ways, a permanent part of the common scene.[77]

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[75] RCMRT, Vol. 4, Q. 5546-7 (Wade, Creasor and Foster); RCMRT, Vol. 9, QQ. 14,529-39 (Robinson, Birley, Satterthwaite and Garlick); RCMRT, Vol. 2, QQ. 5308-9 (Ellison).
[76] RCMRT, Vol. 9, Q. 11,143 (Mellor).
[77] Roberts, *The Classic Slum*, p. 76n1.

The situation was not better in Rochdale. 'Some of these men that were prosecuted', said John A. Tolon, himself hawker, 'were without arms, and some of them without legs, and some of them very old, they were people quite unfit to get their living at ordinary work.'[78] Such distasteful police actions, however, even in places where the costers were very much appreciated, must be understood in the context of local interests. As we shall see in the next chapter, shopkeepers' influences over local politics and the police were often behind stringent local regulations or arbitrary police actions. The criminalisation of the costers as an 'economic threat' to the 'shopocracy' obviously sought to influence the politics of consumption through the control of the competitive environment.

Police interference with the costers' business and the confinement of the latter to a constant state of economic insecurity explains the extreme hatred of the police by the costers. Indeed, many of the costers 'could not understand why Chartist leaders exhorted them to peace and quietness, when they might as well fight it out with the police at once.' As one costermonger told Mayhew: 'Can you wonder at it, sir, that I hate the police? They drive us about, we must move on, we can't stand here, and we can't pitch there.'

> To thwart the police in any measure the costermongers readily aid one another. One very common procedure, if the policeman has seized a barrow, is to whip off a wheel, while the officers has gone for assistance; for a large and loaded barrow requires two men to convey it to the green-yard. This is done with great dexterity;

[78] RCMRT, Vol. 2, Q. 5846 (Tolon).

> and the next step is to dispose of the stock to any passing costers, or to any "standing" in the neighbourhood, and it is honestly accounted for. The policemen, on their return, find an empty, and unwheelable barrow, which they must carry off by main strength, amid the jeers of the populace.[79]

Rev. W. Rogers spoke of the costers as 'the people who are the grist of our treadmills, and supply our workhouses with inmates; and, what is even worse, these are the people who, in times of disturbance, would be the first to band themselves against the authorities.'[80] Mayhew was more blunt: 'I'm assured that in case of a political riot every "coster" would seize his policeman.'

To injure a policeman was considered an important feat of arms that would be celebrated 'by a whip-round from his fellows' meagre earnings.'[81] Costers made their appearance under the Police rubric of the *Times* on a regular basis. For instance, not appreciating his mother to be 'pushed up the court towards her home' by two constables trying to disperse a crowd, John Belham hurled a brick at a policeman, hitting him on the upper lip. When assistance arrived, 'a desperate crowd of some 200 roughs tried to rescue him. The police were stoned and kicked in all directions' by a mob principally composed of women. Similarly, John Andrews was convicted for aggravated assault, the policeman being 'so seriously assaulted ... that he had never since been able to be on duty.'[82] For this already precarious retailing class earning its living in the streets, being 'moved on' or

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[79] Mayhew, *London Labour*, p. 20.
[80] Rogers, 'On the trade, habits, and education of the street hawkers of London', pp. 300.
[81] Mayhew, *London Labour*, p. 20; Chesney, *The Victorian Underworld*, p. 48.
[82] *The Times*, September 2 (1880), p. 10; *The Times*, December 28 (1882), p. 10. See also: *The Times*, December 7 (1880), p. 12; *The Times*, August 19 (1913), p. 2.

having one's goods confiscated could make all the difference between subsistence and semi-starvation, and in this context the general hatred of the police and other authorities was more generally a deep and often violent resentment for a political economic system actively subjecting them to chronic poverty.

Street trading and the employment of children

By the late 1890s the issue of control over street sellers started shifting towards the policing of a rapidly emerging labour force in the urban landscape, child labour. According to the Report of the Board of Education for 1906-07, there were 82,328 children in Great Britain under the 'half time system', most of whom were concentrated in Lancashire and the West Riding of Yorkshire, and the county boroughs of Bradford, Oldham, Sheffield and Burnley. 'These half timers are children over twelve years of age who have obtained a labor certificate, and who are then allowed by the law to be sent to work half a day in mills or factories, provided that they are sent to school the other half of the day.'[83] There were a certain number of regulations attached to this system such as a mandatory limits on the hours worked of 27.5 hours per week. These children, who came under the jurisdiction of the Factory and Workshops Act of 1901, represented only a fraction of those working for a wage. Indeed, the number of children that escaped governmental protection was much more important, and children working for a wage in domestic work, street trading, agriculture and shops constituted a 'little army' of cheap hands.

[83] Mrs Hylton Dale, *Child Labor under Capitalism*, Fabian Tract No. 140 (London, 1908), p. 7.

In June 1898 the Education Department sent a circular to all the 20,022 public elementary schools in England and Wales to inquire about the number of children working for wages. About 9,949 were returned blank, indicating that according to the managers of these schools wage-earning children did not exist at their address. In spite of the obvious 'defective nature of many of the returns', it was found that out of 9,433 schedules received no less than 144,026 full-time school children worked for wages, exclusive of the 409 schedules (3,323 children) which were returned late. Of them, 2,435 were considered hawkers and 76,173 worked in shops or ran errands for shopkeepers, delivering goods such as milk, groceries and the like. The Department also found that 99,623 (69.1 percent) of these wage-labourers in formation worked 20 hours or less, and that 39,752 (27.6 percent) were employed for 21 hours or more. Over 85 percent of them earned 3*s.* or less per week, and 72 percent 2*s.* or less per week.[84]

The findings of the Education Department were abnormally low, if only concerning the number of street sellers. A few years later the Inter-Departmental Committee on Employment of School Children conducted a more exhaustive survey, which led to a substantial reassessment of previous estimates. Reporting in 1902, the Committee estimated the number of children working for wages in 1898 at about 300,000, over twice as many as previously thought. Furthermore, it revised upwards the number of street sellers to 25,000 and the number of children working in shops to about 100,000. The report concluded that 'if all children employed at any time of the year, however irregularly or for however short a period, could be included, it is probable that

[84] 'Elementary schools (children working for wages)', *PP* LXXV.433 (1899), pp. 4, 22, 44-6.

the figure should be considerably increased.'[85] Already a year before the release of these new estimates, the Public Control Department of the LCC estimated 'that between 12,000 and 20,000 children [were] employed in connection with street markets', thus suggesting that the proportion of children employed in street trade was probably much more important.[86]

Section 2 of the Employment of Children Act of 1903 defined 'street trading' as 'the hawking of newspapers, matches, flowers, and other articles, playing, singing, or performing for profit, plying for hire in carrying luggage or messages, shoeblacking, or any other like occupations carried on in streets or public places.'[87] The operative word in the above-mentioned definition is 'profit', and to a certain extent this definition of what street trading is pertains more to past experiences than to the new reality exposed by child labour. Street sellers buying their wares at the public market and disposing of them in the streets operated on their own small capital and profits, and however poor they were, they remained their own masters.[88] Characteristic of the employment of children in relation to street trading here is that they worked for a wage. This, of course, introduced no small amount of conceptual change and ambiguities. For instance, the errand boy working for a shop and carrying groceries through the streets and delivering them at the doors of customers was not a street trader. The same boy invited by a passer-by to sell an item while on delivery would become a street seller if positively answering the request. Similarly, children delivering milk early in the morning for a shop and then turning to

[85] IDCESC, Report, *PP* XXV.261 (1902), p. 17.
[86] IDCESC, Minutes of evidence, QQ. 4136, 4139, 4172 (Spencer).
[87] DCECA, Report, *PP* XXVIII.1 (1910), p. 5.
[88] DCECA, Report, p. 5; Edward N. Clopper, *Child Labor in City Streets* (New York, 1913), p. 4.

street selling for the same shop once deliveries completed were both street traders and wage-earners. While it is virtually impossible to draw the line in a satisfying way given the complex reality animating children's lives and reproductive strategies in an increasingly complex retailing environment, our previous definition of street selling as trade outside fixed shops seems to retain some interesting conceptual advantages.

Alarmed by such figures, and seeking to address the growing number of school children working out of school hours for a wage, Parliament passed the Employment of Children Act in 1903. The Act prohibited children engaging in street trading under the age of 11. It also contained a statutory provision for children less than 14 years of age to work after 9 p.m. and before 6 a.m.; these hours, however, were liable to change by local governments. The Act also gave local authorities the power to make bylaws for persons less than 16 years of age in relation to street trading. The 1910 Departmental Committee appointed to inquire into the functioning of the 1903 Act concluded in its report that the latter was a failure. It found that although 50 out of 74 county boroughs in England and Wales had made street trading bylaws under Section 2 of the Act, only 41 out of 191 small boroughs and urban districts had done so. London, which made bylaws only in 1906, did not even start enforcing them until 1908.

In Scotland, the Act was anything but a dead letter. None of the 33 county councils, three out of the 56 burghs (Glasgow, Partick and Perth), and only 27 out of 979 school boards had adopted bylaws regulating street trading.

> It is worthy to note that in areas in which no byelaws have been adopted, there is very frequently also failure to carry out the statutory provisions of the Act, nor are these provisions always observed even where byelaws exist. Thus we are satisfied that a considerable amount of street trading is still done by children under eleven.

The statutory provision of the Act were 'violated in a very flagrant manner', forcing the commissioners to conclude that, at least in the case of Scotland, 'the problem which the Act was intended to deal with has been generally neglected'.[89]

The regulation of this new generation of street sellers was largely carried through municipal licensing systems. Total number of licenses issued from 1904 to 1908 in England and Wales increased from 5,043 to 22,194, excluding London. According to the LCC, 13,873 badges where used in 1909 by boys between 11 and 16 years of age. Badges were not issued to girls since London, as in the majority of cases in England and Wales, had bylaws prohibiting street trading for girls younger than 16 year old on the ground that the trade was morally compromising. Meanwhile, 300 boys and 3 girls were recorded as street sellers in Scotland, a figure missing the target by a mile.[90] It is no exaggeration to say that these new estimates, while indicative of the magnitude of the problem, fall short of measuring what they sought to capture. The commissioners themselves, in spite of London and Liverpool arguing that they were in control of the situation, received strong evidence to the contrary. Thousands of children must have escaped the licensing net. For instance, John Mulvany, superintendent of the Metropolitan Police in the Whitechapel

[89] DCECA, Report, p. 7.
[90] DCECA, Minutes of evidence, Appendix 1, Table C, p. 380 & Table D-1, p. 390; DCECA, Report, p. 10.

and Spitalfields divisions, not only stated that there was 'very much more' street trading by children in London than there used to be, but also that many children lent their badges when not using them.[91]

The paternalistic nature of this growing apparatus of control over children's lives was rooted in the bourgeois automatic individualisation of the problem, implicitly blaming the parents as irresponsible and therefore in need of 'guidance' by a benevolent state. In Liverpool, where bylaws prohibiting street trading for boys under 14 and girls under 16 were adopted as early as 1898, unless licensed by the Corporation, children seeking to obtain a license were required to appear before the Sub-Committee 'neat and clean'. This step towards respectability somehow was supposed to compensate for the fact that a large number of 'untidy and dirty' children' lived in 'unsuitable homes'. Failure to do so would result in the adjournment of the process until the child was 'able to attend clean and fairly well clothed.' As it happened, children simply borrowed clothes for the occasion.[92] In certain localities such as Birmingham and London, badges of different colours to denote that a child was or was not free from school were used. The resistance to these different forms of control was ubiquitous, though often limited. For instance, in London, boys were ashamed of having to wear a badge, and therefore either turned it inside out, left the strap outside, or put it their pockets.[93]

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[91] DCECA, Minutes of evidence, Q. 1270, 1299 (Mulvany). See also: DCECA, Minutes of evidence, Q. 7663 (Pennington), Appendix 14, p. 532.
[92] IDCESC, Minutes of evidence, *PP* XXV.287 (1902), Appendix 37, p. 415-6.
[93] DCECA, Minutes of evidence, Q. 6745 (Rafter), QQ. 8751-4 (Jacksoon).

The police did not make the lives of these children easy. In Liverpool in 1901, 265 children were arrested for trading without licences, and 647 offenses by and breaches of the regulations were reported for those with a license. In 460 cases the child was cautioned, but 187 of them either saw their licence revoked or temporarily suspended. By 1910, 12 percent of juvenile-adult prisoners and ex-prisoners at Wormwood Scrubbs Prison were street sellers. Reverend S. P. H. Statham stated that 13.2 percent of the lads between 16 and 21 years of age committed to the Wakefield prison from the West Riding of Yorkshire between April 1, 1908, and July 31, 1909 were street traders, most of which being jailed for minor offences against the City bylaws such as sleeping out, trespassing on the railway stations, and obstructing footpaths. In 1905, about 1,000 prosecutions were issued in the metropolis, and in 1908 70,263 contraventions of the street trading bylaws were handed down. Over a six month period from 1909 to 1910, London authorities reported 3,582 infringements by children between 11 and 16 years of age, 2,512 of which (70 percent) were committed by children less than 14 years of age.[94]

It is obvious that for children earning as little as 2*s.* per week and working very long hours, these fines were a serious hindrance to their contribution to the household, and no doubt reproduced a system based on punishing the poor for trying to escape poverty. Legislation that sought to redress what it identified as a social problem often ended up reproducing and even reinforcing it, almost systematically addressing their symptoms rather than their cause. This was apparently well understood by the members

[94] IDCESC, Minutes of evidence, Appendix 37, p. 415-6; DCECA, Minutes of evidence, Q. 1612 (Statham), Appendix 5, p. 523, Appendix 16, Table F, p. 545; Susan D. Pennybacker, *A Vision for London 1889-1914: labour, everyday life and the LCC experiment* (London, 1995), p. 124.

of the Minority Report on the working of the Employment of Children Act of 1903 as they opposed the Majority Report's recommendation for the immediate prohibition of street trading by children. Choosing this path, they argued, 'will tend to aggravate rather than improve the present state of things. ... Street trading cannot, in our view, be treated as an isolated problem without regard to the social conditions in which it exists.'[95] Poverty, they argued, was a major cause behind so many children ending in the streets to earn a few shillings. It was indeed no great insight that children from poor neighbourhoods were disproportionally working for wages outside school hours, and as long as the unemployment, underemployment or sickness of the parents was not addressed, poverty would continue breeding poverty.

Keeping the Wolf from the Door

It remains a bitter irony that those providing the population with cheap food were themselves chronically poor and hungry. Going foodless for more than 24 hours was not uncommon, and the vast majority of them lived in abject conditions in overcrowded and filthy houses. They often lacked the comfort of heat, decent furniture, and proper utensils and cookery. Speaking about the north of England manufacturing districts in the late 1850s, Felix Folio provides a description of their condition of life:

[95] DCECA, Report, p. 19. On the relation between poverty and children employed in street trading, see: DCECA, Minutes of evidence, QQ. 494 (Smith), 3099 (Russell), 4432 (Allan), 6839-45, 6859 (Chadwick), 7214-27 (Commander), 7669-71 (Pennington).

there are many hundreds of hawkers who cannot afford to pay a license, and it would be exceedingly difficult to draw the line between those who can, and those who cannot afford to pay; and the indiscriminate imposition, or rather collection of the tax would be tantamount to taking the bread out of the mouths of many hundreds of our fellow-creatures, and driving them to seek relief from the poor law guardians, perhaps the laxity of the revenue officers is the lesser evil of the two. For I have seen quite enough of hawkers to know that ... [most] just manage ... to keep themselves, and sometimes their families out of the workhouse. And it is for this reason that I cannot agree with the wailing cry of certain shopkeepers ... "who are so heavily taxed" (this is the stereotyped phrase), for they seem to think it no tax on this class of people to be compelled to travel with a heavy load many miles a day under a burning sun, or to sit at a stall all day, enduring the bitter, biting blast of winter, to get saturated with the driving storm, and then to retire at night to a cold and badly furnished habitation, where no steaming kettle, warm slippers, or change of raiment await them, or seek the scanty comforts of an overcrowded lodging-house, with only a very few pence as the reward of the day's misery, patience, and toil.[96]

That the purchase of a license would have made all the difference between destitution and starvation is itself indicative of the deep poverty and wretchedness of the costermongering class in 'normal' times. By 1889, in the same industrial north, things

[96] Folio, *The Hawkers and Street Dealers*, p. 14.

were still the same. Street hawker James Foster handed out a petition to the RCMRT in order to complain about the £2 annual toll charged for a hawking license in Bolton. 'Your Memorialists', the petition read, 'can prove by evidence numerous cases where the profits of hawking are barely sufficient to keep their families and in many an instance has reduced an already poor family to starvation...'[97] Evidence by Dr James Niven in the early 1900s demonstrated that 10 out of 75 individuals residing in the very poor district of Deansgate in Manchester were hawkers, eight of whom were between 45 and 65 years of age.[98] Costermongers embodied an entirely different story than most of their fellow industrial workers who enjoyed the benefits of lower food prices, shorter working hours and higher standards of living.

It is also a testament to their poverty that though the costers needed only a tiny amount of capital to rent a barrow and purchase their stock, a great many of them borrowed their baskets, barrows, trucks and carts, for which they paid an exorbitant rate of interest. Some were so poor that they had to borrow the money with which to purchase their stock.[99] A barrow could be hired for 3*d.* per day or 1*s.* per week, with interest rate on money-lending at about twopence on the shilling.[100] For the average coster earning about 10*s.* per week in the 1850s, the purchase of a barrow costing somewhere between 25*s.* and 40*s.* remained an unattainable dream. In 1873 James Greenwood remarked that

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[97] RCMRT, Vol. 9, QQ. 12,520, 12,522 (Foster).
[98] IDCPD, Vol. 3, Appendix 12, p. 27.
[99] Dodd, *The food of London:* pp. 363-4; Thomson and Smith, *Street Life in London*, p. 58; Hardy, 'Costers and Street Sellers', p. 270.
[100] Mayhew, *London Labour*, p. 30; Olive Christian Malvery, *The Soul Market* (London, 1907), p. 143.

not one coster in twenty possessed his own barrow.[101] Moreover, usurious rates on rented baskets and barrows often put them in debt, thus further reinforcing their general lack of autonomy. At the same time, the continuous arrival of newcomers, taking to the streets as a temporary measure or not, tended to further divide meagre gains into a growing number of hungry bellies. The competition which existed within the retail sector at large was also to be found amongst the costers themselves, and the transformation of what used to be something like a 'trade' in the 1840s into an 'economic refuge' half a century later suggests that costermongering was more to trick starvation than to permanently escape from chronic hunger.[102]

The costers' dwellings were reminders of their own destitution. In the maze of London courts and alleys where the costers lived, poverty and squalor were the norm. By the late 1840s most of them lived in filthy slums populated by dilapidated, badly drained and overcrowded houses where up to 10 and even 12 persons occupied a single room.[103] Given the very nature of their trade, costermongers could not live far from the markets from which they obtained their stock, and could only afford a place at the price of severe overcrowding.

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[101] 'Report into the State of the Poorer Classes in St. George's in the East', *Journal of the Statistical Society of London*, Vol. 11, No. 3 (1848), p. 205; Mayhew, *London Labour*, pp. 68, 176; Greenwood, *In Strange Company*, p. 27.

[102] Helen Bosanquet, *Rich and Poor* (London, 1908[1896]), pp. 56-7. The employment of children early on in the trade in part explains costermongering as a hereditary occupation, composed as it was of 'poor but closely knit communities, living together and possessed of hereditary cultural ties.' (Stedman Jones, *Outcast London*, pp. 61-2).

[103] 'Third Report of the Metropolitan Sanitary Commission', *PP* XXXII.339 (1847-48), p. 26.

> They had to find dwellings with facilities for keeping their donkeys and barrows at night, and also places where no objection would be made to the disposal of garbage produced in the preparation of their wares for sale. The choice nearly always confined itself to decaying slum courts, where rubbish could be thrown out of the windows and the donkeys could sleep in disused privies.[104]

Smalls pools of inky water covered the ground of slum courts where most of them lived. 'In Snow's Rents, in this neighbourhood, you may see a specimen of a very dirty costermonger's colony, with a stream of thick black water and vegetable refuse flowing down the centre of the passage.'[105] And in the 'pestilent colony' of Brandon Road in Belle Isle, an industrial slum situated just north of King's Cross station, costers lived in overcrowded 'fever-dens'.[106]

Under Prime Minister Benjamin Disraeli's second Conservative Government the Artisans' and Labourers' Dwellings Improvement Act 1875 was passed. One of Disraeli's chief social reforms, the Act gave local authorities the permissive power to demolish slum houses in order to replace them with modern ones. In London, the result was catastrophic for the poor in general and the costers in particulars.[107] In addition to

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[104] Stedman Jones, *Outcast London*, p. 172.
[105] Hollingshead, *Ragged London*, p. 111.
[106] Greenwood, *In Strange Company*, p. 64.
[107] 'Report from the Select Committee on Artizans' and Labourers' Dwellings Improvement', *PP* VII.395 (1881); 'First Report from the Royal Commission for inquiring into the housing of the working classes', *PP* XXX.1 (1884-85); Edward Bowmaker, *The Housing of the Working Classes* (London, 1895); Edward G. Howarth and Mona Wilson, *West Ham: A Study in Social and Industrial Problems* (London, 1907), Book 1, Chap. 1-6; Enid Gauldie, *Cruel Habitations: A History of Working-Class Housing 1780-1918* (London, 1974); Anthony S. Wohl, *The Eternal Slum: Housing and Social Policy in Victorian London* (Montréal, 1977); John Burnett, *A Social History of Housing* (London, 1978); Martin J. Daunton, *House and Home in the Victorian City: Working-Class Housing 1850-1914* (London, 1983).

important financial loss, these 'model dwellings' prepared the ground for the housing crisis of the 1880s. No less than 42 acres from 14 different sites of slum property where demolished, displacing 22,868 persons from 5,555 separate tenements. Furthermore, the Metropolitan Board lost over £1.1 million through the excessive compensation of slum owners' dilapidated houses and the drop in the value of land. Virtually all of the targeted areas concentrated on the inner industrial perimeter of central London where a disproportionally high proportion of casual poor lived. Costermongers and hawkers in Whitechapel, Limehouse, St. George's-in-the-East, St. Luke's, Clerkenwell, Islington, St. Giles' and Southwark were amongst the victims of this legal mass eviction. Ten years after the Act was passed, almost half of the land cleared was still vacant. [108]

So was it that with street clearance and model dwellings becoming one of the main tools of social reformers and lower middle class charity, rent became more expensive than what the people they were supposedly helping could afford. In St. Pancras, nothing had been done for the poorest in Somers Town and Agar Town. As Hollingshead put it, those who were investing into these 'model dwellings' to help the poorest of the poor were in fact spending their money

> on a class who are well able to help themselves. ... The costermongers—the street hawkers—the industrious poor, are still rotting up their filthy, ill-drained, ill-ventilated courts, while well-paid mechanics, clerks, and porters, willing to

[108] Stedman Jones, *Outcast London*, pp. 199-214.

sacrifice a certain portion of their self-respect, are the constant tenants of all these model dwellings.'

As the case of the Peabody Dwellings in London demonstrates, these model dwellings were often contradictory projects. In the latter case, rents had to be paid in advance, no arrears were allowed, applications were accepted only for those who could attach an employer's reference, it restricted homework to narrow activities, and though the rent generally compared well with poor courts, it did not take into account overcrowding and the subdivision of rooms. Such restrictions were contrary to costermongers' life on almost every point. Only the most prosperous artisans and skilled workers were able to afford these new model dwellings, further entrenching the poorest segments into dilapidated, overcrowded houses. By the end of the 1880s, costermongers were said to spend one third of their miserable wages of about 15*s.* on rent, and more then half of them lived three or more to a room.[109]

James Greenwood aptly remarked on the extent to which slum dwellings 'is one of the safest investments in the world for a heartless speculator.' For the 'owners of these piggeries' know all too well that their lodgers 'are of a class that wouldn't be accepted anywhere else but in a slum', and therefore often 'realize more rent than do tenements of a like size in fashionable London square' by overcrowding.[110] Amongst the 'wild tribes of Turnmill Street', Clerkenwell, where 'scores of costermongers' lived in 'abodes of dirt

[109] Hollingshead, *Ragged London*, p. 207; Stedman Jones, *Outcast London*, pp. 184-5, 216; Hardy, 'Costers and Street Sellers', p. 271.
[110] Greenwood, *In Strange Company*, pp. 155-6.

and squalor', 'when it rains every available scrap of crockery, with tubs, and pots, and kettles, have to be spread about the floor to catch the descending downpour'.[111] Thanks to the poor management of the metropolis, it was estimated that the number of persons per house increased during the second half of the nineteenth century.[112] Indeed, overcrowding had become such a problem that if the Public Health (London) Act of 1891, which made illegal people living in less than 400 cubic feet of space, had been enforced, no less than 900,000 would have been forced to evacuate their houses and wait for the construction of 500,000 new rooms. The lack of accommodations gave rise to the 'three-relay system' according to which the same bed was let to three different tenants occupying it for eight hours each, and very often the space under the bed itself was let to further tenants. And there was always, of course, the much more luxurious 'two-relay system'.[113]

Working conditions were hardly better. The costermonger often worked up to 18 hours a day, and still starved at the end of it. 'Of all the population of London', wrote Charles Dickens, Jr, 'there are none who work longer hours for a living than do these itinerant vendors; their labour commencing at daybreak, and extending until eleven or twelve at night.'[114] For the 'humblest of the humbler class', an unviable title that costers shared with immigrant bakers, dockers, market porters and general labourers, life was anything but easy. 'Our homes are squalid and unhealthy,' said one coster, 'and hundreds

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[111] Greenwood, *In Strange Company*, pp. 152, 153, 155.
[112] Clement Edwards et al. *The House Famine and How to Relieve it*, Fabian Tract No. 101 (London, 1900), p. 16.
[113] London, *The People of the Abyss*, pp. 115-17. See also: W. C. Steadman, *Overcrowding in London and its Remedy*, Fabian Tract No. 103 (London, 1900).
[114] Dickens, Jr, *Dickens's dictionary of London*, p. 20. See also: Greenwood, 'Food Committee', p. 94.

of us find the length of even a summer's day entirely too short for our main purpose, which is to keep the wolf from the door, that we work Sundays as well as week days.'[115] Indeed, Alfred Ailion, President of the Bethnal Green Traders' and Costermongers' Union, examined before the Select Committee on Sunday Trading in 1906, said that if Sunday trading was to be abolished, 'it would be taking away their [the members of the Union] right of living', while forcing them into starvation.[116]

The growing number of costermongers fuelled competition amongst them, resulting in the maintenance of long hours of work in order to realise meagre profits on very low margins. In the early 1900s, Olive Christian Malvery, a middle-class reformer and ethnographer investigating the life of the coster in London, took to the street in order to better understand their life. Unable to endure the demanding life of the coster, she quit after a month. 'It was a hard life enough,' she wrote, 'up at four each morning, to bed never before eleven, the long walks to the market, and the standing by that blessed barrow in rain and shine... This was the hardest work I think I have ever done. My arms ached, and my legs almost refused to move...'[117] As Malvery suggests, the vagaries of weather were also an important factor.

> "Three wet days," I [Mayhew] was told by a clergyman..., "will bring the greater part of 30,000 street-people to the brink of starvation." This statement, terrible as it is, is not exaggerated. The average number of wet days every year in London is ...

[115] Greenwood, *In Strange Company*, p. 262.
[116] 'Report from the Joint Select Committee on Sunday Trading', *PP* XIII.29 (1906), QQ. 3745-6 (Ailion).
[117] Malvery, *The Soul Market*, pp. 139, 144

161—that is to say, rain falls in the metropolis more than three days in each week, and very nearly every other day throughout the year. How precarious a means of living then must street-selling be![118]

As the development of new technologies of transportation such as the railway and the steamboat transformed the spatial relations of food production and sourcing, so did it alter the very meaning of seasonality by making the crops of different spaces and climates available. Alderman Scarr, mayor of Leeds, estimated in the late 1880s that the fruit and vegetable business had increased from six to ninth months.[119] In spite of such transformations, however, seasonality continued to influence the periodicity of the costers' earnings through cycles, nourishment alternating between starvation and surfeit.

In spite of their hard work, however, costermongering and hawking was a sure occupation to experience the pain of hunger. As Mayhew noted, the 'physical sufferings [of the children] from cold, hunger, exposure to the weather, and other causes of a similar nature, are constant, and at times extremely severe.' Given the low incomes of both women and children and the precariousness of the whole family, the premature death or illness of the father would almost systematically push the family further into destitution. As one coster-lad told Mayhew:

She was a good mother to us. We was left at home with the key of the room and some bread and butter for dinner. ... Sometimes, when we hadn't no grub at all, the

[118] Mayhew, *London Labour*, pp. 8, 59.
[119] RCMRT, Vol. 4, Q. 6572 (Scarr).

other lads, perhaps, would give us some of their bread and butter, but often our stomachs used to ache with the hunger, and we would cry when we was werry far gone. She used to be at work from six in the morning till ten o'clock at night, which was a long time for a child's belly to hold out again, and when it was dark we would go and lie down on the bed and try and sleep until she came home with the food. I was eight year old then.[120]

Young girls and boys of eight years old selling in the streets to help their parents was a common scene in mid and late Victorian Great Britain. Their only education came from the streets, and their lesson was necessarily 'a patient endurance of cold and hunger'.[121] 'Her little face,' Mayhew writes about an eight years old girl, 'pale and thin with privation, was wrinkled where the dimples ought to have been, and she would sigh frequently.' She had to be at the Farringdon-market between four and five o'clock in the morning, making no more than 4*d.* per day. She would get two slices of bread with butter and a cup a tea for breakfast and the same for dinner, with bits of meat on Sunday.[122] Even in 'good' times family labour was necessary to make ends meet.

In 1874 the costers were still subsisting on bread and butter, occasionally supplemented by potatoes, soups and stews.[123] These very poor families would rarely eat less than one quartern loaf of bread per day. By the early 1890s Mary C. Tabor did not find much to commend about the state of the costers' children. She described the girls as

[120] Mayhew, *London Labour*, pp. 537, 41.
[121] Mayhew, *London Labour*, pp. 43, 472, 24.
[122] Mayhew, *London Labour*, pp. 157-8.
[123] 'Third ARLGB', *PP* XXV (1874), p. 227.

'stunted in growth, anxious-eyed, with faces beyond their years', while the boys looked 'dazed, and beaten, their faces worried and vacant'. They often worked at night until the public houses closed, and their general condition largely rendered them incapable to attend the duty of school.

> They have no regular meal times. When they are hungry the mother puts into their hands a "butty," i.e. a slice of bread with a scrape of dripping, lard, or the current substitute for butter, and sends them off to consume it on the doorstep or in the street. The youngest of the brood she supplies with a "sugar butty," i.e. a "butty" with as much sugar as will stick upon the scrape. A draught of stale tea usually goes with it. When funds are low, or where drink forestalls the children's bread, the scrape and cold tea vanish, the sugar butty is a thing of the past, the slice from the loaf becomes an intermittent supply, neighbours help out the children's needs, and free meals at school keep starvation from the door.[124]

In poor neighbourhoods of the east and central south of London where costermongers lived in large numbers, such as Bermondsey, Blackfriars, Southwark and Lambeth, destitution was rampant, with at least two-thirds of them living below the poverty line in the 1880s.[125] Dr Alfred Eichholz, one of His Majesty's Inspectors of Schools, reported in 1904 that at the Johanna Street Board School, Lambeth, 90 percent of the children could

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[124] Mary C. Tabor, 'Elementary Education', in *Labour and Life of the People*, Vol. 2, Second edition, ed. Charles Booth (1891), p. 492.
[125] Benson, *The Penny Capitalists*, p. 113.

not attend the duties of school in a proper way because of the want, irregularity and unsuitability of food.

> The breakfasts that these children get are nominally bread and tea, if they get it at all. ... There is bread and margarine for lunch, and the dinner is normally nothing but what a copper can purchase at the local fried shops, where the most inferior kinds of fish such as skate are fried in unwholesome reeking cottonseed oil. They frequently supplement this with rotten fruit, which they collect beneath barrows, when they are unable to collect it from the top, the facilities of this nature being considerable, for the whole neighbourhood of Lambeth is one coster area.[126]

Eichholz deplored the poor physical constitution and 'dullness of mind' of these children, and the same was said in Newington and Walworth about the children attending the Costers' School.[127] This chronic state of semi-starvation indeed produced very low endurance, with boys lacking the staying power to get through a match of football. He also noted the lack of memory and concentration as well as a general tendency towards low stature. Moreover, he estimated that about 90 percent of the boys were anaemic, 'with pale faces and lusterless eyes... A good many children suffer from blight in the eyes and sore eyelids. The hair is badly nourished and wispy, and the skin is tough, dry, pale, and shriveled, giving a very old look very early in life.'[128] Similarly, James Niven,

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[126] IDCPD, Vol. 2, QQ. 436-7 (Eichholz).
[127] Booth, *Life and Labour of the People in London*, Vol. 4, p. 92.
[128] IDCPD, Vol. 2, Q. 440 (Eichholz).

Medical Officer for Manchester, noted that the diet of the families living in the central district, the poorest part of the city where a disproportionate number of costermongers lived, was inadequate.[129]

In his study of the male population from 100 different occupations, Dr William Ogle found the rate of mortality amongst the costers to be almost twice as high as the average rate from all occupations, second only to London's casual workers (Table 8). Ogle also found out that in relation to industries with highest mortalities, street sellers ranked tenth for liver disease, eighth for gout, fourth for urinary affections, second for diseases of the nervous system, first for diseases of the circulatory system, and, tellingly, first for suicide, leading this latter category hands down with more than three times the average ratio.[130]

> Poverty, misery, and fear of the workhouse, are the principal causes of suicide among the working classes. ... I do not say that all people who commit suicide are sane, no more than I say that all people who do not commit suicide are sane. Insecurity of food and shelter, by the way, is a great cause of insanity among the living. Costermongers, hawkers, and pedlars, a class of workers who live from hand to mouth more than those of any other class, form the highest percentage of those in the lunatic asylums. Among the males each year, 26.9 per 10,000 go insane, and among the women, 36.9. On the other hand, of soldiers, who are at least sure of

[129] IDCPD, Vol. 2, Q. 6290 (Niven).
[130] Ogle, 'Supplement to the forty-fifth annual report of the Registrar-General', Table P, p. lxi. The number of suicide per million of population rose from 67 to 86 in England and Wales between 1865-69 and 1890-94, and from 40 to 54 in Scotland during the same period. See also: John Sibbald, 'A Discussion on Suicide: Its Psychiatrical and Social Aspects', *The British Medical Journal*, September 10 (1898), p. 678.)

food and shelter, 13 per 10,000 go insane; and of farmers and graziers, only 5.1. So a coster is twice as likely to lose his reason as a soldier, and five times as likely as a farmer.[131]

John Thomas Arlidge reported in 1892 that costermongers and hawkers constituted the largest 'proportion of hospital and dispensary patients', and that they often died from tuberculosis. 'Exposure to weather,' he added, 'prolonged standing and sitting in the open air, insufficient food and clothing, and in their homes the absence of most or all sanitary requirements, are doubtless the principal causes of the sickness, suffering, and mortality of the class in question.'[132]

Table 8 Death rates of males in England in selected occupations

Occupation	Mean Annual Death-Rates Per 1000 living				Comparative Mortality Figure, 1880-2
	1860/1-1871		1880-2		
	Years of Age		Years of Age		Years of Age
	25-45	45-65	25-45	45-65	25-65
All Males	**11.27**	**23.98**	**10.16**	**25.27**	**1000**
General shopkeeper	-	-	9.12	21.23	865
Cheesemonger, Milk, Butterman	-	-	9.48	26.90	1009
Greengrocer, Fruiterer	11.41	24.51	10.04	26.57	1025
Fishmonger, Poulterer	15.62	29.21	10.53	23.45	974
Butcher	13.19	28.37	12.16	29.08	1170
Baker, Confectioner	10.72	26.39	8.70	26.12	958
Costermonger, Hawker, Street Seller	20.09	37.82	20.26	45.33	1879
General Labourer (London)	18.35	40.64	20.62	50.85	2020

Source: William Ogle, 'Supplement to the forty-fifth annual report of the Registrar-General of Births, Deaths, and Marriages in England', *PP* XVII (1884-85), Table J, pp. xxv-vi.

[131] London, *The People of the Abyss*, pp. 142-4.
[132] John Thomas Arlidge, *The Hygiene, Diseases and Mortality of Occupations* (London, 1892), p. 132.

By the early 1900s Shirley Forster Murphy, head of the public health department of the LCC, was under the impression that 'on the whole there has been an improvement in that class. One sees less evidence, I think, of starvation, and certainly people are better clothed than they were.'[133] Such was the condition at which the costers had been reduced to, with their 'progress' consisting in 'less evidence of starvation'. Street sellers, whose children had been described as 'hungry, shivering, and almost naked' in 1857, did not show any significant sign of 'progress'.[134] By 1909, out of the twelve occupations with the highest mortality in England and Wales, costermongers ranked third with a life expectancy of 29 years, preceded only by general labourers (27.8 years) and tin miners (28.5 years).[135]

As Israel Zangwill suggested in his account of east London Jewish life, for these 'lost tribes' of hawkers wandering the streets of the metropolis, perhaps only the reassuring promise of a celestial future could make the present misery more bearable.

> The roaring Sambatyon of life was at rest in the Ghetto; on thousands of squalid homes the light of Sinai shone. The Sabbath Angels whispered words of hope and comfort to the foot-sore hawker and the aching machinist, and refreshed their parched souls with celestial anodyne and made them kings of the hour, with leisure to dream of the golden chairs that awaited them in Paradise.[136]

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[133] IDCPD, Vol. 2, Q. 9483 (Murphy).
[134] Rogers, 'On the trade, habits, and education of the street hawkers of London', p. 304.
[135] 'Occupation Mortalities', *The British Medical Journal*, Vol. 2, No. 2551, November 20 (1909), p. 1495.
[136] Israel Zangwill, *Children of the Ghetto: A Study of a Peculiar People* (London, 1896[1892]), p. 234.

As one costermonger once told Mayhew in a slightly less poetic prose, '*it's only another way of starving.*'[137] Costermongering was no sinecure, and the bourgeois promise that hard work would invariably lead to one's prosperity was constantly broken on the back of these walking contradictions. As it happened, these 'wrecks of civilised society',[138] as Arlidge put it, embodied capital's deep contradictions of hunger amidst plenty, poverty from hard work, and social marginalisation in spite of their vital social and economic function.

Conclusion

This chapter has argued that far from being archaic and inefficient figures of the distributive system, costermongers, hawkers, and street sellers were in fact constitutive of the capitalist social relations governing the Victorian and Edwardian periods. On the one hand, the historical importance of the costers lies in that it clearly demonstrates the extent to which 'progress' under capitalism could be, and was, accomplished through highly exploitative class relations. By the end of the nineteenth century costermongering and hawking were no longer hereditary occupations, though such forms of 'recruitment' continued to exist. Most of all, the trade was continuously swamped by an economic system unable to offer anything like full employment at a time during which social safety nets were non-existent. As an economic refuge to the marginalised segments of the population such as the immigrants, the unemployed, the old, the sick, and the disabled

[137] Mayhew, *London Labour*, p. 9.
[138] Arlidge, *The Hygiene, Diseases and Mortality of Occupations*, p. 133.

and handicapped, street selling provided a way to avoid homelessness and the much-feared workhouse, though at the heavy price of chronic poverty, insecurity, hunger, and illness.

On the one hand, the constitution of an increasingly important class of costermongers, hawkers, and street sellers suggests that the 'production' of cheap food cannot be separated from the sphere of distribution. The costers were instrumental to the rise of the working class's living standards precisely because the tiny profits with which the former were 'satisfied' virtually transferred the full benefits of cheap food imports to the latter. In other words, cheap food imports meant absolutely nothing as long as prices were kept artificially high through large profit margins from retailers. The distributive importance of the costers therefore rested in their ability to *realise* what only existed as *potential* – low prices. From a political economy perspective, then, the costers' *distributive* function not only lay in their representation of a highly flexible, efficient, and dynamic element of the distribution system – capable as they were of transporting and distributing food across space to distant working class communities under the pressure of urban development – but also in the importance of their competitive edge (low prices) which favoured a retailing environment conducive to rising real wages through the redistribution of most of the fall in food prices to the working-class. It is precisely these two aspects that form the core of this contradiction.

Arguably the costers interfered with the class interests of other retailers, especially shopkeepers. Indeed, the growth of the costermongering class and the growing custom trusted upon them by the community at large not only reinforced their distributive

role, but also contributed to the maintenance of a highly competitive retail sector within which price wars were endemic. For shopkeepers, the readiness of the costers to work long hours for meagre profits in order to avoid complete destitution represented one threat amongst others to their social status. Yet, shopkeepers' existence and their social status was often only a façade, and the means by which they maintained it less than respectable. It is to a study of this class of retailers that we now turn.

5. A Nation of Respectable Shopkeepers?[1]

> Essentially their [a great proportion of small shopkeepers] lives are failures, not the sharp and tragic failure of the labourer who gets out of work and starves, but a slow, chronic process of consecutive small losses which may end if the individual is exceptionally fortunate in an impoverished death but before actual bankruptcy or destitution supervenes.[2]

Urban restructuring and suburbanisation, population growth, developments in retailing infrastructure, the diversification of food suppliers, and increasing working-class consumption capacity shaped the growth, location, and nature of small-scale retailers between 1850 and 1914. As such, these processes played a vital role in the distribution of food to urban dwellers.[3] In the last chapter we saw that, amidst these processes, an important class of costermongers, hawkers, and street sellers emerged. As distributors of cheap food, the costers were vital to people's reproduction, and no doubt contributed to the creation of a highly competitive distributive environment characterised by low prices. Praised by the community at large, the coster was nonetheless an ambiguous figure of the new bourgeois urban order, embodying a contentious politics of consumption whereby the rise in working class living standards was premised upon locking a whole segment of

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[1] Though often attributed to Napoleon, the expression can be found in Adam Smith: 'To found a great empire for the fole purpofe of raifing up a people of cuftomers, may at firft fight appear a project fit only for a nation of fhopkeepers. It is, however, a project altogether unfit for a nation of fhopkeepers; but extremely fit for a nation whofe government is influenced by fhopkeepers.' See: Adam Smith, 'The Nature and Causes of the Wealth of Nations', in *The Works of Adam Smith*, Vol. 3, ed. Stewart Dugald (London, 1811), p. 439.

[2] Herbert G. Wells, *The History of Mr. Polly* (New York, 1909), p. 184.

[3] Blackman, 'The Food Supply of an Industrial Town'; Janet Blackman, 'The Development of the Retail Grocery Trade in the Nineteenth Century', *Business History*, Vol. 9, No. 2 (1967), pp. 110-7; Roger Scola, 'Food markets and shops in Manchester 1770-1870', *Journal of Historical Geography*, Vol. 1, No. 2 (1975), pp. 153-68.

it into chronic poverty. Unemployment, underemployment, and economic fluctuations created a permanent class of people living on the margins of industrial capitalism whose labour was nonetheless central to its functioning.

But the costers were not alone. Before them, the highly important class of shopkeepers and grocers monopolised the retail arena in important ways. Their middle-class status and social aspirations towards autonomy and independence were contrary in every way to the constitution of exceedingly competitive distributive markets based on low-prices. Shopkeepers embodied the interesting contradiction wherein middle-class aspirations of independence from wage-labour were perennially frustrated by the developmental dynamics of capital itself, which tended to undermine shopkeepers' ability to live comfortably. In this chapter I argue that the shopkeeper's social status between 1850 and 1914 was largely an empty shell. More specifically, I argue that shopkeepers' ability to weather the competitive storm shifted from fraudulent practices (e.g. food adulteration, false weights and measures) to the extensive use and dependence on cheap labour, including the employment of children and women, and coercive forms of labour discipline and exploitation of the retailing labour force.

The mass imports of food at very low price during the last quarter of the nineteenth-century not only brought higher real wages for the working-class, but also undermined the profitability of economic fraud such as adulteration. This process, I argue, triggered a fundamental change in the meaning of 'cheap food' itself, and, as I document in this chapter, the means by which cheap food was made available for distribution. Indeed, food prices during the 1850s and 1860s were maintained artificially

low through widespread adulteration, and evidence of rising prices during those years for certain articles such as meat indicates that adulteration itself increasingly proved incapable of mediating the contradictions that emanated from entrenched poverty and a deficient food supply. The flooding of the food markets with cheap imported goods in the 1870s drastically changed the reproductive dynamics of the shopkeeping class, and from a widespread fraud on the working-class as a whole it increasingly came to depend on the specific exploitation of one segment of the working-class population – that is, the retail labour force – to make ends meet. Rising living standards for the majority were therefore rooted in the growing exploitation and rapidly declining living standards of those workers associated with the shop. As it happened, the shopkeeper's social status was more often than not a facade, the former managing its own increasing social and economic obsolescence through practices antithetical to the ideas of 'respectability' and 'progress'.

The historical development of the shopkeeper in the context of rapidly changing infrastructures of distribution and retail competition was anything but smooth, as I demonstrate in the first section, and the evolutionary dynamics of the trade necessarily reflected the economic pressure exerted on this class of retailers, especially in the context of low food prices. In the second section I explore the extent to which shopkeepers' fate was deeply rooted in their political ability to control the distributive environment, as well as the contradictions that arose from this in relation to larger social trends. Their inability to control the political environment in relation to the different channels of distribution, I document in the third section, gave rise to strategies of reproduction increasingly dependent upon highly exploitative labour-intensive methods. As the cheapening of the

labour force through the employment of youth, women and immigrants increasingly became the norm, so did extended retail hours. Yet, as I demonstrate in the last section through a study of the baking trade, low wages and overwork were anything but new, and were indeed a crucial element of shopkeepers' strategies to survive a retail world mired in cutthroat competition.

Exit through the Shop

Historically, the grocer or shopkeeper referred to a wealthy trader who dealt in foreign produce such as dried fruits, condiments, spices, tea, coffee and sugar from fixed premises for the 'better class'. Traders in butter, cheese, bacon and the like were provision dealers, and both grocers and provision dealers could specialise in a particular trade.[4] By 1850 the term 'grocer' would have been preferred, with 'shopkeeper' increasingly reserved for small, non-specialised retailers lacking capital and social standing.[5] The obvious class character of both terms was captured by the Census, whose classification methodology had less to do with strict definitional rules than with social, political, cultural, and economic markers, as well as one's own pride and beliefs over his social standing. The monopoly that the trade had long held and nurtured was further cracked by free trade policies and the growth of manufactured items. 'The death of many skills', remarked Chris Osgood, 'was a result of the changing patters and methods of

[4] Janet Blackman, 'The Corner Shop: The Development of the Grocery and General Provisions Trade', in *The Making of the Modern British Diet*, ed. Derek J. Oddy and Derek S. Miller (Totowa, 1976), p. 149.
[5] Michael J. Winstanley, *The shopkeeper's world*, pp. 9-15; Phillips, 'The evolution of markets and shops in Britain', pp. 63-4.

manufacturing, especially wholesale distribution and food production, over which shopkeepers had little or no control. Foremost amongst such changes was the growth, after mid-century, in the availability of proprietary, or pre-packaged, goods.'[6] The retail grocer who used to cut his sugar, mix his tea, clean his fruit, and roast his coffee beans was an endangered species, with the progress of manufacturing in the food trades continuously usurping his previous skills and knowledge through packet goods and proprietary articles. In addition, ready-to-sell manufactured commodities loosened the barriers to entry through de-skilling and lower costs. 'Grocery was the most common trade for unskilled recruits', Michael J. Winstanley argued, 'since entry restrictions were minimal, demand was regular and shops had no need to be situated on main thoroughfares'.[7]

The growth of small shopkeepers after 1850 was nothing short of phenomenal. Between 1881 and 1911 their number almost doubled, rising from 330,000 to 625,000 [UK].[8] According to Gareth Shaw, the average rate of population per shop fell from 136,3 in 1801 to 56,0 in 1881, with food shops in Leeds, Hull, Halifax, Huddersfield, Rochdale, Oldham, Wakefield, Lancaster, York and Beverley constituting about 57 percent of retail shops at that time.[9] One of the main characteristics of retail shops during the late nineteenth and early twentieth century was a shift from general to specialised shops. Rising real wages, especially through steep declines in the proportion of the household budget spent on food, not only allowed the purchase of a greater quantity and

[6] Chris Hosgood, 'A 'Brave and Daring Folk'? Shopkeepers and Trade Associational Life in Victorian and Edwardian England', *Journal of Social History*, Vol. 26, No. 2, 1992, p. 296.
[7] Winstanley, *The shopkeeper's world*, p. 45.
[8] Feinstein, 'New Estimates of Average Earnings in the United Kingdom', p. 602.
[9] Shaw, 'Changes in consumer demand', pp. 291, 293.

variety of food, but also permitted the consumption of an increasing range of commodities and services. This fuelled the mushrooming of products and services as varied as hairdressers, furniture retailers, and baby linen dealers. Yet, the growing army of greengrocers, fruiterers, confectioners, bakers, corner shops, grocers, butchers, fishmongers, and cheesemongers was a strong reminder that the backbone of the retailing revolution relied on an increasingly diverse and complex food trade.

One important aspect of this evolution was the growth in the number of shops that sold convenience foods after 1880. For instance, it has been estimated that the number of fried fish shops in the United Kingdom rose from about 11,000 in 1888 to 25,000 in 1910.[10] As Elizabeth Roberts points out about Preston:

> In 1892, there was one fish and chip shop to every 1,533 people, by 1907, this had doubled to one to every 785. In the same period the number of confectioners selling pies and cakes increased from one to 853 people, to one to 472 people; while the number of butchers fell from one to 672 people, to one to 813 people. This can be contrasted with Barrow and Lancaster, where fish and chips, for example, were bought only occasionally and then not as a family meal but by adults going home late from a theatre, cinema, or pub.[11]

Of course, the growth in food shops was tied to employment structures and cooking facilities at home. At it happens, large swaths of the working class took advantage of the

[10] Walton, *Fish and Chips*, p. 5.
[11] Roberts, *A Woman's Place*, p. 159.

basin meal during the Edwardian era, especially where women constituted an appreciable proportion of the working force.[12]

In their study of the Halifax-Calder Valley area, M. Trevor Wild and Gareth Shaw have demonstrated the deepening association between shop location and population distribution during the second half of the nineteenth century.[13] A subsequent study of land use and shop densities in Halifax, Hull, Oldham, Huddersfield, York and Rochdale corroborated their previous findings, identifying a process of linear extension in retail facilities as shops were moving away from city centres and towards suburban locations.[14] This process was not unique to these towns. 'The whole habits of the people have completely changed;' said Alexander Harris, deputy town clerk of Edinburgh, 'the city has spread out into the fields so much, and the citizens have retail shops of every kind in their immediate vicinity, and they prefer to go to those to coming into the centre of the old town as they used to do.'[15] The same was true in Liverpool, where outlying districts were 'principally supplied by the shops'.[16] Similarly, G. Prior Goldney, the City Remembrancer, said that 'London is a very large place, and it is a long distance for anybody to walk down to the market. Your greengrocer, your butcher, and your baker come to the door.'[17] In Newcastle, it was argued that because inhabitants would 'not

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[12] Alfred Williams, *Life in a Railway Factory* (London, 1920 [1915]), p. 111; Roberts, *The Classic Slum*, pp. 107-8; Walton, *Fish and Chips*, pp. 144-5.
[13] M. Trevor Wild and Gareth Shaw, 'Population distribution and retail provision: The case of the Halifax-Calder Valley area of West Yorkshire during the second half of the nineteenth century', *Journal of Historical Geography*, Vol. 1, No. 2 (1975), pp. 193-210.
[14] Gareth Shaw and M. Trevor Wild, 'Retail Patterns in the Victorian City', *Transactions of the Institute of British Geographers*, New Series, Vol. 4, No. 2 (1979), pp. 283-90.
[15] RCMRT, Vol. 7, Q. 14,175 (Harris).
[16] RCMRT, Vol. 7, Q. 13,685 (Holden).
[17] RCMRT, Vol. 2, Q. 458 (Goldney).

come a long distance into the centre of the town, therefore the butchers follow them.'[18] Food shops dominated the distributive network in these newly formed and fast expanding suburbs. By 1880, the bulk of food shops in smaller towns were located in suburbs areas, a trend already apparent in larger settlements 30 years earlier.[19]

The reorganisation of city centres through the centralisation of public market activities and the decentralisation of retailing through the migration of shops to suburban areas was a complementary process in many respects. Beyond the obvious distributive function that both played, a myriad of retail arrangements existed between shopkeepers and markets, especially in smaller towns like Preston where it was not uncommon for shopkeepers – especially butchers – to own a shop in the main shopping street and to take a stall in the market.[20] Public markets and shopkeepers were also complementary in that the latter usually depended on the former for their provisioning. James Allen, farmer and market gardener at Spitalfields from Dartford, Kent, said that he sold to consumers as much as to shopkeepers.[21] In the same vein, the town clerk of Liverpool expressed the view 'that the shopkeepers, or at any rate the dealers who supply the food for many of the outlying districts, do come to the Liverpool markets', with one wholesale fish dealer in Briston arguing that 'The people that we sell to keep shops all over the town.'[22] Such close relationships were also visible in many shopkeepers' complaints over market hours, especially in regards to wholesaling. Since greengrocers, butchers, fishmongers and other shopkeepers went to the market early in the morning to get their goods, wholesalers who

[18] RCMRT, Vol. 4, Q. 282 (Smith).
[19] Shaw, 'Changes in consumer demand', p. 293.
[20] RCMRT, Vol. 9, Q. 14,604 (Ashcroft).
[21] RCMRT, Vol. 2, QQ. 1642-3 (Allen).
[22] RCMRT, Vol. 7, Q. 13,661 (Clare); RCMRT, Vol. 3, Q. 15,231 (Kidd).

turned into retailers during the day were often seen as an unfair competition.[23] Yet, in spite of bylaws prohibiting retailers from selling in the wholesale market, market authorities in Blackburn ignored them entirely.[24] Indeed, and as in the case of municipal regulations over street selling, bylaws regulating public markets' functioning could be ignored according to the forces present. Furthermore, the distinction between wholesale and retail activities was not as clear as one might think, if only because of the changing nature of the distinction itself. In this context, local authorities tended to embrace a pragmatic approach that promoted wholesale markets in order to better control the town's food supply and prices, rather than limiting them to specific hours.

The Politics of Precariousness

Shopkeepers' social position was not unambiguous. Evolving into a difficult retailing environment characterised by cutthroat competition, shopkeepers, unlike costermongers, were ratepayers with more or less important overheads. Their own survival largely depended upon their ability to position themselves at the center of their community's economic life, thereby securing a custom. Diligently and judiciously using their power to grant credit (or 'tick' as it was called), and carefully inquiring into the life of their neighbours in order to determine their credit-worthiness, the economic success of these 'bankers of the poor' was necessarily regulated by the economic pulse of their constituency. Thomas Lloyd remembers that at his grandmother's small general shop in

[23] RCMRT, Vol. 4, Q. 4094 (Kaye).
[24] RCMRT, Vol. 9, QQ. 14,305-12 (Hacking and Gaine).

Morriston, a large village in South Wales three miles north of Swansea, people only 'brought the money every fortnight when wages were paid at the mines and works.'[25] The shopkeeper's ability to offer a temporal 'fix' to economic contractions through credit was an integral part of the working class household economy. It was also an important pillar to the shopkeeper's informal power over the reproductive life of the community. One's ability to obtain credit in times of need often made all the difference between sheer poverty and complete destitution. At any rate, it offered the chance to escape starvation for a few more days or weeks.

As important as this power may have been, however, the structural complexity animating these 'economic ties' was such that small shopkeepers, while hesitant to too easily grant credit, also 'feared that by refusing credit they would lose long-time customers once hardship was over'.[26] It is therefore not surprising to learn that most shopkeepers nurtured a culture of gossip by offering a welcoming space for women to meet during the day. Thus, they sustained an important network of information in regards to the economic welfare (or the lack thereof) of their community, while allowing them to position the credit worthiness of each family composing it. In spite of this, poor households would often send their children to the shop, hoping that what the shopkeeper might refuse to the mother, he would allow by pity to her child.

By the 1870s, the importance of the symbiotic relationship between shopkeepers and their working class community was becoming thinner. The cheapening of food not only fueled expansions in the number of retailers by making the trade accessible to more

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[25] John Birch Thomas, *Shop Boy: An Autobiography* (London, 1983), p. 21.
[26] Hosgood, 'The 'Pigmies of Commerce' and the Working-Class Community', p. 442.

and more recruits—contributing to the exacerbation of an already highly competitive retail market—it also increased the working class's financial autonomy. By undermining previous economic arrangements, these trends help to explain both the high level of casualties among small shopkeepers and the continuous presence of new recruits.[27]

This context of economic insecurity provides a key to understanding shopkeepers' fate in relation to the distributive environment, and their attempts to control it politically. One constant source of headaches was the public market, which shopkeepers saw with great dislike and jealousy.[28] Public markets were indeed a contentious issue in many boroughs, and the political need to provide the town with food in sufficient quantity at reasonable prices often foundered on the rocky shores of municipal politics and economic interests. Walton has demonstrated the extent to which leading local capitalists such as manufacturers and merchants dominated the civic institutions of mid and late Victorian Lancashire.[29] In Salford, Rochdale, Bolton, Oldham, Blackburn, Liverpool, Manchester and Preston, these 'large proprietors' never represented, on average, less than 50 percent of the membership of municipal corporations, though the influence of shopkeepers and tradesmen was already increasing during the 1850s and 1860s. The situation in Ashton, Wigan and Accrington was different, with dealers and shopkeepers controlling 'civic leadership' early on. 'From the 1880s onwards, however, the social composition of Lancashire's borough councils began to change, as the influence of big business went into a patchy but cumulative decline.'[30] As Councillor Kirkman from the Bolton

[27] Hosgood, 'The 'Pigmies of Commerce' and the Working-Class Community', pp. 450-1.
[28] RCMRT, Vol. 11, p. 107.
[29] Walton, A Social History of Lancashire, pp. 229-33.
[30] Walton, A Social History of Lancashire, p. 231.

Ratepayers' Association put it in 1889:

> Up to the present time for the last 25 or 30 years the markets have been regulated by a committee which has consisted in a great measure of shopkeepers, some of whom have property in the immediate neighbourhood of the retail market hall where the retail market is; and they seem to have legislated to force people into that direction and away from where the wholesale market is...[31]

Of course, the politicisation of market governance by shopkeepers sought to transform an otherwise oppositional, competing force into a vehicle to promote their own interests. As William Augustus Casson, clerk in the Local Government Office, pointed out: 'one finds cases where the local board is composed to a large extent of shopkeepers, and those shopkeepers find it to their interest to fix such scales of tolls and to take such stallages and rents as will make it unprofitable to outsiders to come into the town to trade, so that the goods cannot be sold at a less price than the shopkeepers themselves can sell at.'[32] Yet, though this 'shopocracy' succeeded in maintaining and advancing its interests in many cases, it did not go unchallenged. Indeed, one of the former members of the sub-markets committee in Hull, a merchant in foreign fruit, was shown the door for trying to prevent the exposure of English goods.[33]

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[31] RCMRT, Vol. 7, Q. 13,105 (Kirkman).
[32] RCMRT, Vol. 2, QQ. 833-4 (Casson).
[33] RCMRT, Vol. 2, Q. 5123 (Bradnum).

The formation of the Glasgow United Fleshers' Society, which regrouped 300 to 400 members embracing all the fleshers in Glasgow, helps to shed light on how shopkeepers perceived their own economic interests. As one of their representatives argued, 'markets and slaughter-houses should be made to stand upon their own legs, and ... the rates of the several markets and slaughter-houses should bear a proportion to the general expenditure."[34] The nature of the complaint was that dues paid for the use of the public slaughterhouses should serve exclusively to cover the fees associated with them. The substantial profits made by the slaughterhouses, they argued, was an unfair and disguised tax on their earnings as the surplus was used for other expenses like the reimbursement of the debt upon all markets in Glasgow, which was estimated at £160,000 in 1889. The master butchers of Edinburgh made the same point. With a surplus from the Cattle Customs Account of £2,836 in 1888, their representative R. Addison argued that while it was necessary to collect dues in order to maintain market accommodations, 'it is not just to tax any trade to the extent of providing a surplus for the general good of the city'.[35]

Apart from the public market, the shopkeeper competed against a growing and increasingly appreciated costermongering class. As we saw in the last chapter, local civic institutions were of prime importance for the regulation of street selling, and evidence suggests that shopkeepers were not inactive in implementing strict rules and fees as a way to starve off, or at least control, competition. 'It is evident that, in a city which has its streets closed to "pushcart" vending and to open-air markets, costlier methods of

[34] RCMRT, Vol. 7, Q. 15,359 (Kirkwood).
[35] RCMRT, Vol. 7, Q. 14,413 (Smith).

marketing are given an artificial opportunity to develop.'[36] Still, the relationship between shopkeepers and costers was often ambiguous, and necessarily depended upon popular support at the municipal level and the shopkeepers' ability to erase the internal contradictions that arose from a class of retailers characterised by the diversity of its members' social status. The removal of the costermongers in Leather-lane, Holborn, following local shopkeepers' appeal to the police, is a particularly instructive case of how interconnected the shopkeeper's business with the coster's was. Housewives in the neighbourhood liked 'to make one errand do', buying from both costermongers and shopkeepers according to what was needed. Moreover, most of them could not 'be persuaded that they can buy as cheap at the shops; and besides they are apt to think shopkeepers are rich and street-sellers poor, and that they may as well encourage the poor.' As a result of the abolition of the market, customers simply transferred their business to another 'unauthorised' market. Within two weeks, after further appeals to the police by the shopkeepers, the Leather-lane market resumed its activities. A similar case happened in the New Cut, Lambeth, though this time the complaints to the police were made by shopkeepers and tradesmen from the adjoining parish of Christchurch, Blackfriars-road. Interestingly, even the respectable tradesmen in 'the Cut' saw their receipts diminish upwards of 25 percent as a result of the removal of the costermongers.[37]

The complementary relationship between shopkeepers and costermongers remained strong throughout the period under review. In spite of the multitude of local arrangements, shopkeepers, especially in large towns, welcomed them in their streets as

[36] Sullivan, Markets for the People, p. 216.
[37] Mayhew, *London Labour*, pp. 59-60.

they recognised the strong correlation between the presence of hawkers and increased turnover. 'Shopkeepers of all description', reported James Greenwood upon his visit to Whitecross-street market on a Saturday night of late October 1868, 'had stalls opposite to their respective shops, in common with those of the costermongers—butchers, fishmongers, greengrocers, and even haberdashers and crockery dealers. Those stalls belonged to the owners of the shops opposite which they stood, and were served by their own people.'[38] By the early 1890s, the same tense, yet symbiotic economic bond persisted, with the LCC reporting that 790 out of the 5,292 stalls in the 112 'unauthorised' markets established by costermongers in the streets of London belonged to shopkeepers. Furthermore, the report stated that out of 70 local shopkeepers interviewed, 60 were favourable to these informal markets, while six were indifferent and 4 hostile.[39] In smaller towns where hawkers did not amalgamate into informal markets, as in Portsmouth, shopkeepers competed directly against street sellers by adopting their methods and going round with their carts and vans.[40]

Furthermore, shopkeepers also had to confront a public opinion most favourable to the costermongers as distributors of cheap food. For instance, in Rochdale, street hawkers worked under a licensing system between 1875 and 1887. Town clerk Zachary Mellor even recognised 'that great advantage accrues to the poor people of the town by their having the facility of buying marketable commodities from hawkers'.[41] The system was stopped on a legal technicality, thereby rendering hawking activities illegal. In spite

[38] Greenwood, 'Food Committee', p. 92. See also: Hardy, 'Costers and Street Sellers', p. 262; Howarth and Wilson, *West Ham*, pp. 34-5.
[39] Sullivan, *Markets for the People*, pp. 212-3.
[40] RCMRT, Vol. 3, Q. 14,420 (King).
[41] RCMRT, Vol. 2, Q. 4685 (Mellor).

of the interdiction, however, street selling continued unabated. Shopkeepers were not slow to seize the occasion to summon them. In fact, the matter was 'brought up so frequently before the magistrates, [that] they came to the conclusion that in place of fining the hawkers 5*s*. or 10*s*. with costs, they would fine them only 1*s*. without costs.'[42] In other words, the magistrates created nothing less than a 'new' licensing system. As Peter Johnson, a resident from Rochdale, explained, hawkers bought in the wholesale markets of Manchester and 'then come to the surrounding towns and sell those vegetables or fish at a considerably less price than we could otherwise purchase them at.'[43] In this respect, the magistrates' conclusion fully recognised the vital role played by the costermongers in the town's food supply, yet also increasingly reconciled the politics of consumption and local interests through the legal system, acting as an informal licensing system.

Shopkeepers' interests were not easily reconcilable with the population's growing appreciation for the coster. Thus, decisions to stave off competition by either applying stringent license fees to street sellers or by entirely prohibiting their activities were often met by unimpressed local residents whose interests as consumers lay first and foremost in the availability of cheap food. As one unhappy inhabitant of Christchurch put it:

> I see the President of the Fruit-sellers' Association wants everybody to live and let live except the poor unfortunate vendors of cheap fruit. The payers of big rents and heavy rates have been so used to enormous profits that the price of fruit has been

[42] RCMRT, Vol. 9, QQ. 11,141, 11,143 (Mellor); RCMRT, Vol. 2, QQ. 5844, 5887-8 (Tolon).
[43] RCMRT, Vol. 9, Q. 11,144 (Mellor).

> prohibitive. I am glad to see barrows in our streets, where you can buy as good, and sometimes better, fruit than in the shops at a price within the reach of ordinary mortals. ... [T]he costermonger is a recognised institution, and I fail to see why we in Christchurch should be compelled to abstain from fruit except, as a great luxury, because certain shopkeepers are not content with fair profits and wish to squash the poor coster.[44]

The politics of consumption surrounding the distribution of cheap food was a strong solvent to the shopkeeper's middle class aspiration of independence and social status. Moreover, as these few examples regarding the symbiotic relationship between small shopkeepers and costermongers demonstrate, shopkeepers were far from a homogenous group, and appeals to solidarity by the better-off sections necessarily clashed with the diversity of interests and the individual necessity of economic pragmatism. Though a nuisance for some, the coster was also a blessing for others. This is a strong reminder that though the relationship between shopkeepers, costermongers and public markets could be, and often were, tense and contradictory, their relationship was also complementarity in many ways, at least for a working class whose business was often divided amongst different retailers.

More worrying for shopkeepers were large-scale retailers such as co-operative societies and multiple shops. The development of the railway and the parallel transformation of public markets into wholesale distributive centers reinforced the

[44] 'Live and Let Live', *The Star*, November 17 (1894), p. 5.

dynamic relationship between technologies of mass circulation and the infrastructure to mass distribute food goods. The maturation of an organisational structure of large-scale retailers capable of taking advantage of the acceleration in the movement of goods in space tightened competition in the retailing sector, further eroding the shopkeeper's ideals of independence, security, and comfort.[45] As we shall see in a moment, the social status traditionally associated with their trade increasingly became dependent upon longer work hours, the intensification of family labour, 'blind-alley' labour, and the overworking of their employees. As Henry W. Macrosty put it:

> No class of shopkeepers is so much exposed to the competition of stores, multiple shops, and co-operative societies as the grocers who at every turn must be beaten by the low prices which the superior buying advantages of their rivals make possible. ... The grocer must "cut," make "leading lines" to attract trade, or even adopt less reputable means of securing some profit. ... Over all the great bulk articles of his business the grocer and provision dealer cannot hope to control prices...[46]

As Macrosty suggests, large-scale retailers were able to offer low prices because of their capacity to realise economies of scale. John Taylor, owner of four shops in Swansea,

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[45] Geoffrey Crossick, 'The petite bourgeoisie in nineteenth-century Britain: the urban and liberal case', in *Shopkeepers and Master Artisans in Nineteenth-Century Europe*, ed. Geoffrey Crossick and Heinz-Gerhard Haupt (London and New York, 1984), pp. 62-94; Geoffrey Crossick, 'Shopkeepers and the state in Britain, 1870-1914', in *Shopkeepers and Master Artisans in Nineteenth-Century Europe*, pp. 239-69.

[46] Henry W. Macrosty, The Trust Movement in British Industry: A Study of Business Organisation (Kitchener, 2001 [1907]), p. 209.

South Wales, and a fifth one in Ilfracombe, England, on the other side of the Bristol Channel, complained that goods delivered by railway, though coming faster, suffered from high rates on small quantities. Sugar and fruit he generally obtained from Bristol. But most of his goods such as tea, coffee, seeds, arrowroot, oranges, jams, macaroni, and sago came from London. Since the bulk of these goods came in quantities ranging from one cwt. to five cwt., Taylor, unlike large-scale retailers, was rarely in a position to take advantage of lower freight rates for larger consignments that exceeded 500 lbs.[47] Taylor was not an isolated case. The Birmingham and Midland Counties Grocers' Protection and Benevolent Association complained that the 'scale charge' was both 'excessive' and 'unjust'. While the petitioners did not ask for the 'entire abolition of an extra charge being made on small items,' they nonetheless 'respectfully suggest[ed] that such items be confined to weight of 100 lbs.'[48] Both examples are interesting not only because they highlight the relatively limited scale at which 'important' middle class grocers were operating, but also because they reveal the growing gap between small-scale distribution and large-scale technologies of circulation, as well as the sharpening of the tension between the two. By quoting lower rates for the transportation of larger quantities, railway companies were in fact implementing policies geared towards economies of scale as a means of rationalising the movement of commodities in space, including food goods.

The growing importance of large-scale retailers after 1880 and their clear economic advantage in a highly competitive distributive environment in part explains the formation of numerous trade associations and other forms of collective actions by

[47] RSCR, *PP* XIII-XIV, Part 1 (1881), QQ. 3329-489 (Taylor).
[48] RSCR, *PP* XIII-XIV, Part 2 (1881), p. 227.

shopkeepers. Though the origin of a bitter and ferocious anti-co-operative movement arches back to the 1850s, it was only during the Edwardian era that shopkeepers became active in municipal elections, campaigning for lower rates and expenditures as a strategy to mitigate the effects of competition. Yet, while the political importance of shopkeepers at the municipal level in places such as Leeds, Ashton-under-Lyne, Sheffield or Cardiff was undeniable,[49] the movement never represented more than a small fraction of the whole trade. Contrary to co-ops and multiples, shopkeepers' associations lacked, by their very nature, the internal cohesion and integration that made their competitors so effective. Moreover, and this should not be minimised, large-scale retailers embodied the very idea of 'progress' at a time during which a laissez-faire approach to market policies, though not always upheld, remained an important ideological veneer to the political class. In addition, internal social and economic divisions tended to dilute, rather than nurture, solidarities.[50] Rising prices after 1896 only sharpened the economic advantage of large-scale retailers, and evidence suggests that the number of grocers, bakers and butchers declined during this period, especially in settlements with populations over 75,000.[51]

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[49] Winstanley, *The shopkeeper's world*, pp. 101-2.

[50] Charles Booth, 'Shopkeepers and General Dealers', in *Life and Labour of the People in London*, Vol. 7, ed. Charles Booth (London, 1896), pp. 247-58; Crossick, 'Shopkeepers and the state', p. 240; Winstanley, *The shopkeeper's world*, pp. 75-93, 126; Michael Winstanley, 'Concentration and competition in the retail sector *c.*1800-1990', in *Business enterprise in modern Britain: From the eighteenth to the twentieth century*, ed. Maurice W. Kirby and Mary B. Rose (London and New York, 1992), pp. 247-55.

[51] P. Ford, 'Excessive Competition in the Retail Trades. Changes in the Numbers of Shops, 1901-1931', *The Economic Journal*, Vol. 45, No. 179 (1935), pp. 501-8; P. Ford, 'Decentralisation and Changes in the Number of Shops, 1901-1931', *The Economic Journal*, Vol. 46, No. 182 (1936), pp. 359-63; P. Ford and G.V. White, 'Trends in retail distribution in Yorkshire (West Riding), 1901-1927', *The Manchester School* (1937), pp. 119-25; Gareth Shaw, 'The evolution and impact of large-scale retailing in Britain', in *The evolution of retail systems, c.1800-1914*, ed. John Benson and Gareth Shaw (Leicester, 1992), p. 163.

'I am as honest as I can afford to be': The Social Costs of Social Status

'The small shop is rapidly losing its place in the economy of distribution,' proclaimed a Fabian tract in 1897, 'and the "respectable shopkeeper" is disappearing as the Store and the Limited Liability Company step in to do his work. In the grocery trade the shopkeeper has become a mere salesman who deals in proprietary articles and needs no skill to select his goods.'[52] A few years later *The Times* dropped a bomb in the retail trade with an article predicting 'the passing of the grocer'. Like the Fabians, the article highlighted the unbearable competition from co-operative stores and multiple shops, further noting that 1901 had broken new records of bankruptcy in the grocery trade. This 'process of attrition' was so advanced, the correspondent continued, that the single-shop grocer 'will soon have almost disappeared' from many districts. The trade has so completely changed over the last 50 years as to convert 'the old-fashioned grocer, who required to know many things about the "art and mystery" of his trade, into a vendor of packet goods, so that a large proportion of the grocer's work of the present-day could be accomplished almost equally well by an automatic machine delivering a packet of goods in exchange for a coin.'[53] Contemporaries were undoubtedly right in arguing that shopkeepers, especially in the food trades, were strongly impacted by a retail environment evolving towards mass distribution. And while their assessment was on the whole true, as we shall see in the next chapter, they were notoriously wrong in declaring the 'patient' economically dead.

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[52] William Johnson, *Shop Life and its Reform*, Fabian Tract No. 80 (London, 1897), p. 2.
[53] 'The Passing of the Grocer', *The Times*, August 18 (1902), p. 13.

As it happened, shopkeepers would die a thousand deaths as most commentators underestimated the resilience of shopkeepers' recourse to methods that fell under the rubric of what Marx called 'absolute surplus value'. Shopkeepers' survival within a highly competitive retail market centered around cheap food largely depended upon their capacity and willingness to implement strategies of reproduction capable of weathering the competitive storm. This was particularly salient given that their costs of operation were generally higher. Contrary to street sellers, shopkeepers had overheads and rates, which, unlike large-scale retailers, could hardly be diminished through economies of scale. Complaints about the burden of local taxation were perennial, and sharpened after 1890 as rates rose appreciably in order to cover the increasing percentage of total government expenditure disbursed by local authorities. Squeezed between the imperatives of competition and the demands of their social position, most shopkeepers responded by adopting labour-intensive methods such as wage reduction, long hours, the introduction of cheap juvenile, female and immigrant labour, and the extended use of family labour.[54]

But what made perfect sense at the individual level of the shopkeeper also tended to reproduce the very problem plaguing the retailing sector as a whole. Indeed, shopkeepers' willingness to lower their own living standards and those of their employees kept postponing the purging of the 'economic deadwood' from the retail trade, further entrenching a destructive competitive environment that fuelled a race to the bottom. While Arthur Baxter was wrong to predict the imminent death of the shopkeeper,

[54] Winstanley, *The shopkeeper's world*, pp. 63-74.

he was nonetheless right in pointing that the retailing revolution brought forward by the development of large-scale retailers had completely changed the very nature of competition itself.

> Among grocers, as among other shopkeepers, the small man has fallen on evil days. In no trade apparently has "cutting" been fiercer. The competition of "the stores" has forced grocers to lower their prices until it is now exceedingly difficult for the man with only one shop to make a living; in a few years' time the trade will probably be confined to large firms, and to a certain number of very small shops in poor districts, where the master is on the same social level as his customers.[55]

As small shopkeepers knew all too well, ideals of respectability and independence were often just that – unrealised promises except for those few catering for, and patronised by, the upper classes. And while packaged goods, the introduction of new sales techniques, advertising, window display and pricing and mark-ups were all part of the new arsenal by which shopkeepers tried to compete,[56] for a very large proportion of them the sinful practices through which they sought economic redemption were as contradictory as they were a constant reminder of the intrinsic moral fragility of their economic status. Far from being 'regressive' or 'archaic', such methods were precisely what kept shopkeepers

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[55] Arthur Baxter, 'Grocers, Oil and Colourmen, &c.', in *Life and Labour of the People in London*, Vol. 7, ed. Charles Booth (London, 1896), p. 220.
[56] Blackman, 'The Corner Shop', p. 149.

economically afloat in a retail environment mired in competition. If they could not win the battle of scale, they could, and did, survive by adopting rather questionable practices.

'Mr. Shopkeeper Thief'

As it happened, middle and upper class respectability was more often than not a convenient façade to mask the generalised dishonesty of the retail trade. With the almost ubiquitous practice of adulterating food goods revealed by the 1856 Select Committee on food adulteration, the satiric magazine *Punch* wrote in November 1856:

> We should no longer wonder at tradesmen adulterating their goods, when the very derivation of the word 'trade' ought to act as a warning to us; for the report of the Analytical Commission clearly tells us that 'trade' is derived from '*tradere*—to betray to deceive.' Consequently, a tradesman is one who deceives, and when he sells you poisoned articles for pure ones, there can be very little question of his deceit.'[57]

The association of 'fraud' and 'robbery' with the very essence of 'trade' speaks loud to the 'economic morality' achieved by the retailing class, especially those engaged in the food trades. 'The amount of adulteration in almost every article of food and drink ... is very appalling,' wrote *The Dublin Review* in 1855, 'and indicate that a great deal of our conventional and almost stereotyped boasting of our commercial integrity is absolutely

[57] *Punch*, November 1 (1856), p. 172.

without foundation.'[58] Indeed, by mid-nineteenth century a leading grocer could tell Mayhew that he could not name twenty shops in all of London selling unadulterated coffee.[59]

Adulteration would continue unabated during the 1860s. In *The Seven Curses of London* (1869), James Greenwood accused our sinful shopkeepers with the curse of 'theft'. Vehemently condemning food and drink adulteration as a 'much safer system of robbery' than robbery itself, Greenwood did not hide his contempt over the shopkeeper's kleptomaniac tendencies.

> And, more insatiable than the leech, you are not content with cheating him to the extent of twenty-five per cent. by means of abominable mixtures and adulteration, you must pass him through the mill, and cut him yet a little finer when he comes to scale! ... But by means of your dishonest scales and weights, you may go on stealing rashers from Monday till Saturday night that is, and live long to adorn your comfortable church pew on Sundays. I must be excused for sticking to you yet a little longer, Mr. Shopkeeper Thief, because I hate you so.[60]

Yet shopkeepers were both seller and buyer of goods, and it was not uncommon for dishonest traders to have weights of either 15 ounces or 17 ounces in the pound, according to the occasion. Greenwood was appalled by the 1,300 convictions for false

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[58] 'Food and its Adulterations', *The Dublin Review*, Vol. 39, No. 77 (1855), p. 75.
[59] Mayhew, *London Labour*, p. 184.
[60] Greenwood, *Seven Curses of London*, pp. 152, 153.

weights and measures in 1868 in London. He knew all too well that convictions represented only a fraction of the actual number of false and defective weights seized, which itself represented only a fraction of those in use. And while the districts of Southwark, Newington, St. George's, Hanover Square, Paddington and the Strand did not even bother to send any returns, 70 percent of the persons convicted over a period of six months in the district of Westminster were provision dealers, including dairymen, greengrocers, licensed victuallers and cheesemongers. 'When the last batch of shopkeeper-swindlers of St. Pancras were tried and convicted, the ugly fact transpired that not a few of them were gentlemen holding official positions in the parish.'[61]

A Commission appointed in May 1868 to inquire into the condition of the exchequer standards reported that a total of 18,060 false and defective weights (11,392), measures (5,666), and balances (1,002) were seized by inspectors in 1866 in Great Britain, resulting in 6,094 convictions under the Weights and Measures Acts. With penalties and costs respectively amounting to about 15*s.* and 5*s.*, cheating the working class no doubt remained a very profitable business.[62] Perhaps more disturbing, however, were the five counties and 60 cities and burghs that made no returns. Amongst them are rather very important ones: Cardiff, Newport and Swansea in Wales, Dundee, Falkirk, Glasgow and Greenock in Scotland, and Birmingham, Blackburn, Bradford, Hull, Leeds, London, Manchester, Middlesbrough, Peterborough, Portsmouth, Plymouth and

[61] Greenwood, *Seven Curses of London*, p. 154.
[62] 'Fourth Report of the Royal Commission on Inspection of Weights and Measures', *PP* XXVII.249 (1870), Appendix 3, Abstract C, p. 112-3.

Wakefield in England.[63] This suggests that the 1866 figures are but a fraction of an otherwise systematic fraud on the working class' meagre incomes. Of course, in poor neighbourhood where people were tied to the shop through credit, their ability to complain about adulterated food and short weights and measures was practically null, a situation that reminds us that a shilling in the hands of the poor was always worth less than the same shilling in the hands of the rich.

The commissioners made clear that there was strong evidence to suggest 'that much of the unwillingness and negligence shown by the local authorities of many districts in carrying out the provisions of the existing laws has been caused by their reluctance to entail any material increase in the burden of their local rates.'[64] As ratepayers, shopkeepers were unlikely to finance their own surveillance by empowering local authorities to hire inspectors through higher rates. As such, class politics was essential in the economic position of the shopkeeper's social status, inaction or limited capacities from underfunded local authorities often being the best political course for a class of shopkeepers largely uninterested in having their private business overseen and regulated by public powers. Complaints made by shopkeepers about the use of false weights and measures by hawkers in London in the 1890s triggered the following reaction by one of the LCC's inspectors: 'the shopkeepers whose names are attached are, in my opinion, only one degree removed in class from the hawker. The neighbourhood is a very poor one. All of the grocers in the original complaint had already received

[63] 'Fourth Report of the Royal Commission on Inspection of Weights and Measures', Appendix 3, Abstract C, pp. 93-116, Appendix 12, p. 379.
[64] 'Fourth Report of the Royal Commission on Inspection of Weights and Measures', p. vi.

cautions... Their instruments for weighing were approximate to those of the costers of whom they complained.' The LCC must not have been generally impressed by the level of 'respectability' of its shopkeeping class, for in 1894-95 its inspectors visited 35,000 premises and 800,000 glasses were measured to ensure that they did contain the required volume on drink.[65]

Blind-Alley Labour

We saw in the last chapter the importance of children in the distribution sector of the British economy. It was estimated that by the late 1890s no less than 100,000 children were employed in shops in some capacity, and evidence by officials suggests not only that the figure was itself inaccurate, but that the 1900s saw a rapid expansion of child labour in connection with the sphere of distribution. Indeed, close to a third of all the London shops employed juveniles by the late 1890s, and by 1906 it was estimated that 55,000 out of 750,000 school children in London (7 percent, and up to 20 percent in poorer neighbourhoods) worked for a wage.[66] By 1910 Alfred George Chamings, one of the Principal Assistants to the Education Officer of the LCC, thought that possibly up to 18 percent of the boys between 11 and 14 years of age in London were employed generally.[67] In some places such as Blackburn and Preston, the proportion could reach over one-third. And as the case of Liverpool demonstrates, with over half of the child labour force in the early 1900s employed by milk dealers, greengrocers, grocers, butchers

[65] Cited in Pennybacker, *A Vision for London*, pp 124, 127.
[66] Pennybacker, *A Vision for London*, p. 124.
[67] DCECA, Minutes of evidence, Q. 9021 (Chamings).

and the like, food trades remained an important sector for the exploitation of children.[68] As John K. Walton has argued, 'the fish and chip trade, like many others, maintained a heavy dependence on child labour well into the twentieth century'.[69]

The members of the Majority Report of the Royal Commission on the Poor Laws and Relief of Distress of 1909 reported that the 'great prominence of boy labour ... is, perhaps, the most serious of the phenomena which we have encountered in our study of employment'.[70] Interestingly, the commissioners were particularly attentive to the importance of a rapidly expanding sphere of distribution.

> The problem owes its rise in the main to the enormous growth of cities as distributive centres—chiefly and most disastrously, London—giving innumerable openings for errand boys, milk boys, office and shop boys, bookstall boys, van, lorry, and trace boys, street sellers, etc. In nearly all these occupations the training received leads to nothing; and the occupations themselves are, in most cases, destructive to healthy development, owing to long hours, long periods of standing, walking, or mere waiting, and morally are wholly demoralising.[71]

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[68] IDCESC, Minutes of evidence, Appendix 40, p. 422. See also: 'Royal Commission of the Poor Laws and Relief Distress' [hereafter RCPLRD], Vol. 20, Boy Labour, *PP* XLIV.921 (1909), Appendix 5, Table 1, pp. 193-204; Appendix 7, Table 4, p. 210.
[69] Walton, *Fish and Chips*, pp. 16, 82-3.
[70] RCPLRD, Report, *PP* XXXVII.1 (1909), p. 326, §141 (Majority report).
[71] RCPLRD, Report, p. 325, §137 (Majority report).

J. G. Cloete considered the errand boy working in a small shop in a poor neighbourhood to be the 'most hopeless position', for 'his prospects are absolutely nil.'[72] The work itself was hard and long hours were frequent, especially on Saturdays when up to 16 hours of work would be accomplished. The boy's principal occupation was to deliver orders to customers, which had become very popular as the shopkeeper tried to stand out from the competitive crowd by offering new conveniences and services to secure their custom. Boys either carried heavy baskets or were harnessed to handcarts.[73]

That these young wage-labourers struggling to survive came disproportionally from poverty-stricken neighbourhoods was no great insight. According to Dr Thomas, Assistant Medical Officer of the LCC who inquired in the physical condition of 2,000 school children from 14 different schools, 233 out of 384 wage earners showed signs of fatigue, 140 were anaemic, 131 had severe nerve signs, 64 were suffering from deformities from carrying heavy weights and 51 had severe heart signs.[74] Similarly, Mr Christie, headmaster of North Corporation Street Board School, situated in one of the poorest districts of Liverpool, reported that 12.5 percent of the boys were employed outside school hours, and that they were all 'poor, stunted, little, ill-developed children.'[75]

Particularly distressing for the commissioners was not simply the striking number of school children working while attending full-time school, but also the extent to which

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[72] J. G. Cloete, 'The Boy and His Work', in *Studies of Boy Life in Our Cities*, ed. E. J. Urwick (London, 1904), p. 125.
[73] Spencer J. Gibb, 'Boy Labour: Some Studies in Detail', in *Problems of Boy Life*, ed. John Howard Whitehouse (London, 1912), p. 67.
[74] Alden, *Child Life and Labour*, pp. 115-6.
[75] IDCESC, Minutes of evidence, Q. 6796 (Christie).

most children leaving school at 14 years of age entered into unskilled jobs with little perspective of learning a trade. Indeed, by 1909 it was estimated that up to 80 percent of boys leaving elementary school entered unskilled occupations, most of them working for shopkeepers who were all too happy to take advantage of this manna of cheap hands.[76] The problem that contemporaries referred to as 'blind-alley' labour was indeed growing yearly.

> Blind-alley labour is boy and girl labour employed in an industry from which it will be ejected towards the end of adolescence. The blind-alley worker is one temporarily employed in an industry for a few years (the length of time varying from industry to industry) without at the end of the period obtaining a permanent foothold in it as an adult worker. The essence of the blind-alley job is that it is a juvenile job, offering little opportunity for absorption into the higher grades of the industry.[77]

As these children grew older shopkeepers would dismiss them and hire younger ones, thus throwing on the labour market unskilled young adults while forming the next generation of poor. For Spencer J. Gibb, it was precisely such discontinuous work offering no training and career that had 'so enormously increased within recent years'.[78] That a certain amount of 'blind-alley' employment – particularly noticeable in the case of

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[76] RCPLRD, Vol. 20, p. 4; R. H. Tawney, 'The Economics of Boy Labour', in *Problems of Boy Life*, ed. John Howard Whitehouse (London, 1912), p. 32.
[77] Arthur Greenwood, 'Blind-Alley Labour', *The Economic Journal*, Vol. 22, No. 86 (1912), p. 309.
[78] Gibb, 'Boy Labour, pp. 58-9.

grocers and butchers – was practiced is demonstrated by the 1911 census returns for England and Wales. With only one exception of greengrocers in 1901, the number of males at age 15-20 employed by milksellers, butchers, grocers, greengrocers and bakers (makers and dealers) was greater than those at age 20-25 in 1901 and 1911, and this without counting the large numbers of errand boys employed as messengers and clerks.[79]

The grinding mill of poverty awaiting this class of unskilled boys and girls made few exceptions, and occupations such as errand boys, shop boys, messengers and van boys were disproportionally represented in the army and distress committees.[80] In London, for instance, 42.6 percent of army recruits aged 14 were shop and errand boys.[81] 'A number drift into the army,' said Arthur Greenwood, 'not from motives of patriotism, or even through the glamour of military life, but from the force of stern economic necessity. Distress committees are overwhelmed with them.'[82] Roland Williams, Superintendent of the Divisional Office in charge of the London Exchange in the northwest of England, reported that out of 1,302 casual labourers applying for relief in Liverpool, 369 (28.34 percent) had been errand messengers and shop boys after they had left school.[83] The casualisation of labour and the formation of the next generation of poor was very much a process in the making, and one to which shopkeepers largely contributed.

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[79] Census 1911, England and Wales, General Report, pp. 139-40.
[80] RCPLRD, Vol. 20, Table 25, p. 54, Appendix 4, p. 165, Appendix 5, Appendix 7, Table 10, p. 211; Greenwood, 'Blind-Alley Labour', p. 310-1.
[81] RCPLRD, Vol. 20, Appendix 4, p. 165.
[82] Greenwood, 'Blind-Alley Labour', p. 311.
[83] Tawney, 'The Economics of Boy Labour', p. 26.

The extent to which shopkeepers depended upon the underpaid labour of children and adolescents was obvious in public authorities' unwillingness to enforce legislation intended to protect them. By 1913, notes Susan D. Pennybacker, 'over 61,000 cautionary notices were served upon shopowners; many of these were for breaches of the hours provisions covering juveniles.' That same year a memo for the Public Control Committee from the Education Committee of the LCC stated that 'it is very desirable to avoid as far as possible any unnecessary inspection of shops'.[84] As always, politics trumped the welfare of children. For Parliament and local authorities alike, shopkeepers were electors first, and dependent on the exploitation of child labour second.

Shop Assistants

Butchers, fishmongers, retail grocers, fruiterers, confectioners and greengrocers were all open late, in part because on the level of competition and the necessity of making their profits out of smaller margins on larger turnover, and in part because of the perishable nature of their trades. Butchers invariably worked from 6 or 7 a.m. to 8 or 9 p.m., and until 12 p.m. on Saturdays, and fishmongers usually worked from 7 a.m. to 9 p.m. Retail grocers, with the exception of high-class businesses in the West End, worked from 8 a.m. to 9 p.m. during the week, until 11 p.m. on Fridays, and up until 12 a.m. on Saturdays. Greengrocers were at the market at 4 a.m., working until 10:30 p.m. during the week and up until 1:30 a.m. on Saturdays. In the butcher trade, head shopmen or managers earned between 30*s.* to 70*s.* a week, assistants from 15*s.* to 30*s.*, and boys from

[84] Pennybacker, *A Vision for London*, pp. 124, 126-7.

7*s.* to 14*s.* The greengrocer's assistant, working from 3 a.m. to 6 p.m., earned between 20*s.* to 30*s.* per week.[85] Women, whatever their trade, often earned less than 50 percent of men's wages for the same task.

Shop hours were long, averaging 75 hours per week in England and 80 hours in Scotland. As a rule, hours of work in Wales were shorter, about 65 hours.[86] This evidence, however, was obtained by the Royal Commission on Labour in relation to the employment of women as shop assistants. On the one hand, all the assistant commissioners voiced the great difficulties they had in reaching shop assistants. The latter were often unwilling to give evidence against their employers, either by fear or because some employers made silence compulsory on the subject of wages. It was therefore not surprising that most of them asked not to reveal their identity. At the same time, those who suffered the most from overwork and harsh conditions of labour were the 'most inaccessible, from the very fact that they have no time to go to social meetings and have less courage to complain.'[87] It was no great secret that worse cases of exploitation existed, although the commissioners' net had largely failed to 'catch' them. Implicitly if not explicitly, then, the commissioners' estimates of weekly hours were, at best, low. Indeed, Thomas Sutherst, an early-closing advocate, estimated that 25 percent of shop workers worked 90 hours per week, and 50 percent 80 hours.[88] Conditions of work were invariably worse in suburban shops.

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[85] Baxter, 'Grocers, Oil and Colourmen, &c.', pp. 200-1, 227.
[86] 'Royal Commission on Labour', Vol. 23, The Employment of Women, *PP* XXXVII, Part I.545 (1893-94), pp. 3-9 (London), pp. 85-9 (Provinces), pp. 234-6 (Wales), and pp. 286-90, 315-7 (Scotland).
[87] 'Royal Commission on Labour', Vol. 23, pp. 4, 87.
[88] Gary Cross, A Quest for Time: The Reduction of Work in Britain and France, 1840-1940 (Berkeley, 1989), p. 86.

On the other hand, and most importantly, one should not conflate working hours with shop hours, a distinction rarely made by contemporary reformists. Shopkeepers did not go out of their way to clarify this either, preferring to point out that shop hours also included time for dinner and tea. Thus, working hours very rarely included overtime, such as time passed in the shop after closing to clean, tidy up and prepare it for the next day.

> Although the hours were long, they were nothing compared to those we had to put in at Christmas time. From the end of November we had to keep on working until one in the morning of the following day. So then it came about that Saturday got to be the shortest day in the week. We didn't work overtime on that day, because if we did we'd be working on Sunday and that would be irreligious and couldn't be thought of. But they made up for it by waking us up at four o'clock on Monday morning so as to put in 3½ hours' work before the shop opened. ... When the shutters went up on Christmas Eve we were all thankful that all that extra work was over and done with for another year. I don't think any of us looked forward to having much of a 'merry' time next day, we were too fagged. ... The boss gave each of us a Christmas present of five shillings for which we tried to put on a look of surprise and gratitude. We'd worked about eighty-four hours unpaid overtime during December.[89]

[89] Thomas, *Shop Boy*, pp. 157-9.

Moreover, the Royal Commission on Labour of the early 1890s did not have too much trouble finding cases of juvenile shop workers toiling from 90 hours to 110 hours per week on starvation wages, thus making a mockery of the Shop Hours Regulation Act of 1886, which provided that persons under 18 years of age could not work more than 74 hours per week, including meal times.[90] As William Johnson remarked in the late 1890s, the Act, 'up to 1893, contained no provisions to ensure its enforcement—which was left optional with the local authorities—or penalties for non-compliance with its regulations. The promoters of the measure relied upon its moral effect, and, in consequence, it remained practically a dead letter.'[91] By 1896 there were only five inspectors in England and Wales and two inspectors in Scotland to enforce the Act.

The autobiographical notes recorded by the young Tom Lloyd (a fictitious surname) is highly relevant of the exploitation and hardship experienced by shop workers. Lloyd worked 74 hours from Monday morning to Saturday night in a shop in London for 8*s.* a week, being most grateful to the shopkeeper's wife who gave him a cup of coffee and some bread and cheese on Saturday night for his supper. He lived in a common lodging-house, a cheap accommodation where lodgers lived together in one or more rooms. This is how he divided his 'war chest' to survive.

> So then I had to think out how to live on eight shillings a week, and I worked it out as best I could. My breakfasts at Colepeter's coffee shop came to two shillings and eightpence a week, rent and washing cost three and eightpence, and that left only a

[90] 'Royal Commission on Labour', Vol. 23, pp. 85, 287-8.
[91] Johnson, *Shop Life and its Reform*, pp. 12-3.

> shilling and some pennies for dinners and tea. So the first thing to do was to make breakfast cheaper. I bought a little spirit stove and a tiny kettle for ninepence the lot, some methylated spirit in a medicine bottle for threepence, a loaf of bread for tuppence three farthings, and some beef dripping which I kept in an old jam jar, for fourpence. A tuppenny packet of cocoa lasted me a week and as it was a thick sweety kind I didn't have to buy any milk or sugar. There was plenty of room in my clothes box for them, so I kept the lot there so that Mrs Pagles [the landlady] shouldn't see them. ... I reckoned that I saved one and six [1*s.* 6*p.*] in a week by doing things that way. Later on I saved another ha'penny on two loaves of bread a week by going up to the Old Kent Road where a new German baker was selling bread at tuppence ha'penny the loaf. This way I had three shillings and tuppence for the rest of the week and I had to make it do till things got better. If I had a good dinner on Monday such as a beefsteak pudding, fourpence, potatoes, a penny, and a pennor'th of rice pudding after, a penny cup of coffee and a penny roll had to do for Tuesday.[92]

Lloyd does not mention any money for supper, and it seems fair to say that he probably ate only bread. Arguably every 'choice' had its dire consequence; one day's surfeit being another day's hunger. For the working poor, to which most of the shop workers belonged, making ends meet was a constant preoccupation, and every possible scheme would be considered if they could make money go further. To make life 'easier', and because his

[92] Thomas, *Shop Boy*, p. 90.

clothes were 'worn and shabby', our young boy took on other small jobs, admitting that 'it was a job to make eight shillings do and I often went hungry at the end of the week.' Before going to the shop, which opened at 8 a.m., Lloyd went to two other shops 'to take down the shutters in the morning, sweep out the shop and now and then give the windows a rub-over, and then come at night and put the shutters up.' For this work, which took him about two hours per day, he received 7*s.* per week, almost doubling his earnings. Or course, working 74 hours for 8*s.* or close to 90 hours for 15*s.* was a no brainer, as it not only 'meant a good dinner every day', but the financial capacity 'to get another pair of trousers' and 'saving some money.'[93]

The frugality of Lloyd's existence was no accident in a distributive sector largely dependent upon cheap labour and overwork. Yet it should be realised that this was for a single boy alone. Now add to this meagre income a wife and two young children and bread becomes the main course every single day of the year. As Lloyd's recollection suggests, a disproportionate amount of money had to be spent on clothes, further depleting an already insufficient wage. This was particularly devastating for women who earned, as a rule, less than their male shop companions, thus making 'married life on such a salary a life of systematic starvation and privation to keep up a respectable appearance.'[94] As many contemporaries argued, celibacy was almost compulsory for shop assistants, marriage itself being 'a bar to getting employment'.[95] In fact, ageing was not a very good idea, one shop assistant from Liverpool claiming 'that 50 percent of the

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[93] Thomas, *Shop Boy*, pp. 97-8.
[94] 'Royal Commission on Labour', Vol. 23, p. 314)
[95] Margaret G. Bondfield, 'Conditions Under which Shop Assistants Work', *The Economic Journal*, Vol. 9, No. 34 (1899), p. 277; Johnson, *Shop Life and its Reform*, p. 10.

male assistants ended up on the docks after they lost their "young and smart appearance."'[96] The shopkeeper wanted cheap hands and would struggle like the devil in the holy water to avoid employees with social conditions (e.g. adulthood, married, breadwinner) that would require higher wages. That the distribution sector of the British economy recorded the unenviable lowest trade union density in 1892 with only 1 percent is itself the proof that shopkeepers were very efficient in their quest for cheap labour.[97]

This was even truer for those subjected to the 'living-in system', which afforded no accommodation for married persons. It has been estimated that about two-thirds of the 750,000 shop workers in the early 1890s lived under this brutish system of organised exploitation. By the 1890s apprenticeship had virtually disappeared, and shopkeeping, once a skilled trade, was considered by and large 'a purveying trade only'. The living-in system grew out of the old custom, especially in the drapery and grocery trades, of boarding and lodging apprentices. In actual practice, however, the system was nothing more than a method to squeeze as much labour out of an already cheap labour force as possible. And although the system itself relied extensively upon exploiting shop assistants' 'half-conscious feeling that each one is an employer in embryo',[98] there can be no doubt that given the obvious lack of social mobility in retailing most shop workers were there out of sheer economic necessity. Of course, some would gradually work their way out to find employment in higher-end shops where they could enjoy better wages

[96] Cross, *A Quest for Time*, p. 91.
[97] McIvor, *A History of work in Britain*, p. 202.
[98] Johnson, *Shop Life and its Reform*, p. 12

and shorter hours, but this was far from the norm in an economic sector increasingly recognised for producing casual labourers on a mass scale.

Shop assistants worked for a fixed wage, which included boarding and lodging. While it was possible for a female shop worker employed in a higher-end shop to earn £45 per year, including commissions, the majority earned no more than £30 per year with board and lodging, and less than £20 per year in poorer neighbourhoods was not uncommon. In Wales, for instance, it was found that 320 out of 443 (72.2 percent) women earned less than £30 per year with board and lodging, and 440 (99.3 percent) less than £40 per year. From the 1880s onwards shopkeepers started to rely heavily on women's cheap labour. For instance, evidence obtained from shop assistants in South London in 1891 revealed that 64 out of 97 women (66 percent) earned less than £50 per year, compared to 59 out of 156 men (37.8 percent). The disparity was even more accentuated at the extremes, with 33 women (34 percent) and 13 men (8.3 percent) earning less than £30, and 1 woman (1 percent) and 23 men (14.7 percent) earning more than £100.[99]

Shop assistants subjected to the living-in system slept two in the same bed and did not choose their nightly companion. Many suffered from headaches as a result of the foul air characteristic of small, overcrowded rooms. There was no privacy; all the space allocated, including the furniture, was shared with the other employees. As Johnson put it: 'they are lodgers without freedom of choice as to the food they eat, the rooms they occupy, the person they sleep with, the time they may come and go after business hours,

[99] 'Royal Commission on Labour', Vol. 23, pp. 2, 235.

the opinions they may express, or the associations they may belong to. They cannot receive friends who do not work for the same firm.'[100] As it happened, employers had considerable power over their 'free' wage-labourers. They could, and very often did, dismiss an employee at a moment's notice, without reasons or extra pay, while, in the same breath, requiring the employee to give one week's, and sometimes one month's, notice. Given the importance of references from one employer, anybody interested in working their way up the retailing ladder was by necessity an obedient servant very unlikely to rebel. On the other hand, many employers required their employees to sign an agreement about the terms of their employment, which could include very abusive conditions such as the obedience to all rules, the subjugation of the employee to be searched when leaving the premises, or the prohibition of employment in the same trade within the same neighbourhood or area for a certain period of time after dismissal. As Johnson put it, in order to avoid sheer destitution from unemployment 'the assistant will probably sign away his liberty with scarcely a glance at what he is doing'.[101]

For those going through this humiliating system of exploitation, life was minutely organised, controlled and regulated by a series of house rules, which could easily exceed 100. The control of their body, freedom and intimacy within and outside the house was choreographed on the movement and cadence of the rhythms of shop life and capital accumulation. A typical list could run like this:

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[100] Johnson, *Shop Life and its Reform*, p. 8.
[101] Johnson, *Shop Life and its Reform*, p. 3. See also: 'Royal Commission on Labour', Vol. 23, p. 88; Bondfield, 'Conditions Under which Shop Assistants Work', p. 282

I.—The House door is closed at 11 p.m. Saturdays at 12 p.m. The gas will be turned out 15 minutes later. Any one having a light after that time will be discharged.

II.—Assistants sleeping out without permission will be cautioned twice, and discharged at the third offence.

III.—All bedrooms to be cleared at 8 a.m.

X.—Assistants must not lean out of windows, or do anything to attract the attention of persons outside.

XII.—No assistant to enter any bedroom but her own.

XX.—Strangers are not allowed to enter the house.

XXIII.—No flowers to be put in water glasses or bottles.[102]

As the list suggests, with rules came obedience, which were enforced through a rigid system of fines. Arguably, shopkeepers were much better at enforcing private rules than Parliament at enforcing public laws. Depending on the nature of the 'offense', shopkeepers assiduously robbed their employees from 1*d.* to 2*s.* 6*d.* at a time. Some fined assistants going into the kitchen, while others charged their labour force for the use of the sitting room. It was common to enforce the employee's subscription to a medical fund for 6*d.* to 1*s.* per month, the physician, of course, conveniently chosen by the employer. Employees would also often paid a monthly fee for the library, and the 'luxurious' use of a bath and clean sheets had their costs, too.

[102] Bondfield, 'Conditions Under which Shop Assistants Work', pp. 278-9.

Assistants would also be fined 1*s.* if they arrived five minutes after the closing of the House door or shut out if 15 minutes late. At other places, fines increased according to the number of minutes the assistant was late. Given that most shop workers would not finish their day until 9 p.m., the almost ubiquitous curfew at 11 p.m. was anything but a reminder that their liberty was curtailed in space and time by 'invisible threads' linking them to the shop. In addition, shop workers were also subjected to a series of shop rules and fines. One could easily loose 5*s.* per month on mistakes in bills or the loss of duplicate bills, incorrect entry in the books, lateness, sending a parcel to the wrong address and absence from the counter, even in the case of illness.

If shopkeepers were quick to take, their thriftiness was legendary. Some gave one and only one small jug of hot water per week per employee, and while most places failed to provide their staff with the most basic sanitary accommodation, yet they still expected them to arrive clean and tidy up for work.

> That a girl should be confined to a shop out of which she dare not move for eight or ten hours at a stretch without any retiring accommodation is inhuman. In hundreds of cases in Glasgow, for instance, the nearest closet is one common to several shopkeepers, and often it is without water, owing to the shopkeepers, who are assessed for it, repudiating using it, and so the water supply is cut off.[103]

[103] 'Royal Commission on Labour', Vol. 23, p. 314.

By the early 1890s the old practice of forcing shop assistants to go out on Sundays was still common, albeit declining. The practice by which shopkeepers reproduced family life was not disinterested, and while they enjoyed their Sabbath reproducing family life and ties, their capital was not at rest since the forcing out of their employees allowing them to save on meals. Most importantly for shop workers, however, is that it forced them to depart from precious shillings in order to cover food and travelling expenses during that day. Even those who were technically allowed meals on Sundays often felt that the owner's family preferred to eat together and have the house for themselves, and consequently left the premise.[104]

Complaints about meals were frequent. Tea, bread and butter were usually obtained for breakfast, thus providing cheapness to shopkeepers and low nutritional value to employees. Bread, butter, cheese and, perhaps, either ale or milk, would be obtained for supper. Dinner broke slightly from the monotony of this anaemic diet, offering cold or hot meat, generally beef or mutton, with one vegetable, usually potatoes. In 'proverbial' shops where a second course was offered, pastry or pudding would be served every other day. Fruit and green vegetables were copiously absent. Very short time was allowed for meals. Half an hour for dinner and 20 minutes for tea were the norm, and shop assistants were liable to interruption during meals, causing indigestions as many 'acquire a habit of "bolting" their food in a remarkably short time'. After a tea break around 4 p.m. shop assistants very rarely stopped for supper until the closing of the shop, which often happened as late as midnight on Saturdays. In some shops, there was no supper at all,

[104] Bondfield, 'Conditions Under which Shop Assistants Work', p. 283.

except, perhaps, a cup of coffee or tea around 9 p.m. Complaints about food were also common. Much resentment arose from badly cooked and undercooked food as well as from food of inferior quality such as rancid butter, stale bread and weak tea from exhausted leaves. In addition to the monotony of such a diet, food was often insufficient in quantity, forcing workers to spend a good part of their meagre income in buying various foodstuffs to supplement their ration, not uncommonly bought at the shop.[105] And as if insufficient food was not enough, shop workers were often cruelly reminded of their economic inferiority. As Lloyd recalled from a grocery shop in Greenwich where he lived and work, breakfast 'was the usual cup of coffee and chunks of bread and butter, but the manager, his wife and children sat at the table tucking in to eggs and bacon and toast.'[106]

Under these circumstances, with shopkeepers cheating their employees at every possible occasion, it is not surprising to find chronic health problems. Most women complained of ill health, swollen legs because of long standing, indigestion, prostration, headaches, exhaustion and backache.

> The constant supervision of the shop-walker, the patience and politeness to be shown to the most trying customers, the difficulty of telling the truth about the goods without incurring the displeasure of the managers, the long standing, the close atmosphere even in well ventilated shops when crowded with customers, the short time for meals, the care required to keep things in their right places and to

[105] Bondfield, 'Conditions Under which Shop Assistants Work', pp. 279-86; 'Royal Commission on Labour', Vol. 23, pp. 3, 87.
[106] Thomas, *Shop Boy*, p. 162.

> make out accounts correctly, the long evenings with gaslight and the liability to dismissal without warning or explained reason all tend to render the occupation of the shop assistants most trying to the nerves and injurious to health.[107]

Dr R. M'G. Service, who had a practice in the East End of Glasgow, gave a written statement about the condition of female shop assistants in Scotland.

> Prolonged standing, long hours, and want of proper sanitary accommodation lead to ailments affecting the bladder, bowels, uterus, nervous, vascular (blood), and muscular systems. These ailments are evidenced by the legs becoming swelled with fluid, varicose veins appearing in the lower extremities, and muscular pains and weakness being felt from the waist to the soles of the feet. ... Facial neuralgia, spinal neuralgia, and headache are very common complaints. Anaemia (popularly speaking poverty of blood) will be found in the majority of shopwomen. This arises from the long hours, close confinement, and long intervals between meals, with consequent disturbance of the digestive and assimilative functions. ... Mothers with children from 1 to 10 or 12 years of age frequently come to us wondering why their children are so delicate.[108]

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[107] 'Royal Commission on Labour', Vol. 23, p. 89. See also: Tuckwell and Smith, *The Worker's Handbook*, pp. 153.
[108] 'Royal Commission on Labour', Vol. 23, Appendix B, p. 318. For a similar opinion, see evidence given by Dr Edmistoun (p. 287).

Long hours of work, low wages, insufficient food, the lack of freedom and sanitary accommodation, constant surveillance and the fear of dismissal combined to create a highly toxic work environment that not only locked shop workers in chronic poverty, but also caused numerous health problems.

Excruciatingly long hours remained the norm until 1914. The Shop Hours Act of 1904 empowered local authorities to fix shop closing hours by local government 'order' if two thirds of the shops agreed, and in this respect the Act sought to capitalise on the tendency in better class shops to institute an early closing day once a week. By 1909 only 15,000 shops were covered by these orders and evidence suggests that a considerable amount of laxity existed. With over one million shop workers in 1910 dispersed in some 460,000 shops, the Act, as so many before, was a dead letter.[109] It was not until the 1911 Shops Act that a statutory half-day weekly holiday for all staff members was introduced. The 1912 Shops Act consolidated the 1886, 1904 and 1911 Acts regulating employment in shops, but failed to carry forward stricter regulations.[110] These different Acts are as many reminders that Parliament remained reluctant, if not utterly uninterested, in regulating working conditions in the private space of the shop, preferring instead to police those who tried to eke out a bare existence in the public space as street sellers.

[109] Cross, *A Quest for Time*, p. 89-90.
[110] Hosgood, 'A 'Brave and Daring Folk'?', pp. 300-1.

The Staff of Life?

The advent of 'cheap bread' had already begun towards the end of the eighteenth century with the appearance of a new class of 'undersellers' selling bread at a lower price than the price fixed by the Assize of bread. By the time of the repeal of the Assize in the metropolitan area in 1815, this class of bakers represented no less than one-third of the trade; the system was officially abolished in the rest of the country in 1836.[111] By the mid-nineteenth century 'fifty thousands bakers were struggling to exist in conditions of intense competition.'[112] In fact, the competition was so great and the supply of labour so important, that street piemen in London were mostly bakers who could not obtain employment in their own trade, often working until three o'clock in the morning to earn a meager 7*s*. per week.[113] Night work and Sunday work were now part and parcel of the trade, and by 1862 it was estimated that fully two-thirds of the London bakers were undersellers. And while about one-sixth of the London master bakers were operating in the full-price trade, the remaining one-sixth was composed by a new class of bakers—the 'cutting trade'—which was now underselling the 'undersellers'.[114]

Cutthroat competition amongst individual capitals (master bakers) and labourers (journeymen bakers) led to the systematic adulteration of bread and horrific working conditions. The undersellers, said Cheeseman, master baker in the full-priced trade, 'only exist now by first defrauding the public, and next getting 18 hours work out of their men

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[111] Sidney Webb and Beatrice Webb, 'The Assize of Bread', *The Economic Journal*, Vol. 14, No. 54 (1904), pp. 196-218; John Burnett, 'The Baking Industry in the Nineteenth Century', *Business History*, Vol. 5, No. 2 (1863), p. 99-100.
[112] Burnett, *Plenty & Want*, p. 113.
[113] Mayhew, *London Labour*, p. 196.
[114] RGCJB, § 430 (Dwarber).

for 12 hours wages.'[115] 'Even the bourgeois,' said Marx, 'from his standpoint, grasps the position of the 'underselling masters''.[116] Indeed, adulteration and overwork were the two main sources whereby thousands of small, undercapitalised, and non-mechanised bakeries were allowed to survive under intense competition. As we saw, by the late 1870s the adulteration of bread had virtually disappeared, and the cheapness of raw materials made them scarcely worth adulterating. What did not fade away, however, was the chronic overworking of the journeymen bakers, which continued unabated until the 1910s as an important strategy to maintain the costs of production, and therefore keep prices low. In other words, in the same way that the coster's tiny profits allowed much of the benefits of cheap food imports to be transferred to the working class, so was the journeyman baker's overwork one of the principal methods through which the decline in the price of imported wheat could be passed on to consumers in the form of cheap bread.

Examined before the Sanitary Commission in 1848, Dr William A. Guy gave chilling evidence about the working and sanitary conditions in the baking trade. Most bakehouses were located in a cellar under the shop or roadway, and 'the great majority' of them were found to be 'in a very unwholesome state; very close, very dirty, very damp and very offensive.'[117] As Henry Austin contended, the air of these small, ill-ventilated, and gas-laded bakehouses was very often contaminated by imperfect drainage.

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[115] RGCJB, §479 (Cheeseman).
[116] Marx, *Capital*, Vol. 1, p. 361.
[117] William A. Guy, 'Baking trade. Copy of the evidence given by Dr. Guy before the Sanitary Commission, in reference to the persons employed in the trade', *PP* LI (1847-48), p. 2.

> Imagine a baker, with a foul cesspool in his yard in close company with a well, and a choked drain in his kitchen—a combination by no means difficult to realize. The very heat of his oven brings a stream of poisonous atmosphere into his bakehouse, adding further contamination to every loaf that he has made with the already poisoned water from the well behind.[118]

Guy visited many bakehouses where the floor was damp from the sewage, with the back of the bakehouse often receiving all the drainage of the house. The air became very offensive in these dungeons where the normal temperature in these dungeons could easily reach 110°F (or 43°C).

Working conditions were even more horrific. Men were commonly locked in the bakehouse while working during the night to prevent them from stealing or drinking, and while the privy was generally situated within the bakehouse, 'in even less capitalised concerns the men relieved themselves on the coal-heap.'[119] Heat, dust, and physically exhausting work were the norm, and Guy argued that the journeymen bakers were 'almost without exception overworked, and from 18 to 20 hours of continuous occupation, with perhaps a nap of from an hour to two hours on a board, may be stated as the rule with the large majority of the trade.' By then, only 4 hours stood between these 'free' labourers and slavery. Work hours were even worse towards the end of the week, toiling for more than 48 hours on a stretch without rest or sleep from Thursday night until

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[118] 'First Report of the Metropolitan Sanitary Commission', p. 131 (Austin). See also: RGCJB, § 94 (Bennett).
[119] Smith, *People's Health*, pp. 208-9.

Saturday night in order to produce enough bread for the weekend. Saturday evening was often the only 'holiday' that they got, as they were back at work on Sunday. Systematically working over 110 hours per week for 16*s.* to 17*s.* on average. Only 14 percent of them had a 'tolerably healthy appearance, and 70 percent complained of diseases and disorders. They were particularly subject to rheumatic fever, erysipelas, consumption, indigestion, bowel complaints, skin diseases, rheumatism, bleeding nose, and 'diseases of the chest' such as cold, cough, asthma and shortness of breath, hoarseness, inflammation of the lungs, and spitting of blood.[120]

Over a decade later, in 1862, H. S. Tremenheere published a devastating report on 'The Grievances complained of by the Journeymen Bakers', which not only confirmed Guy's findings, but also the almost systematic use of adulterants in the baking trade. As it happens, the cheap loaf came at a heavy price. On the sanitary side, the report gave ample evidence that men counted on the indefectible companionship of rats, cockroaches, ants, and other friends. The filth and despicable sanitary conditions of these bakehouses were made plain by some unsavoury descriptions given by author of the report from the bakehouses he visited.

> No. 2.—One oven under parlour. There was another under shop; but the place became so infested with ants and vermin that it could not be used, as "they used to run over the bread in such numbers." Ceiling (bare rafters) about 8 feet high. Cobwebs numerous, and in some parts heavy masses. Dust and dirt everywhere.

[120] Guy, 'Baking trade', pp. 1, 3-4.

> Ventilation very imperfect; apertures small, but bakehouse large and said to be cool. Drains only lately made with pipes and "trapped;" smell before that sometimes very bad, from imperfect stone drains. ... Dirty sack on the board where bread is made, on which a man had been sleeping. [...]
>
> No. 5.—One of the troughs was open and full of flour, ready for the next batch. Hundreds of animals were running about over the lid and by the side, and upon the wall close by. The other trough was imperfectly shut, and many of these animals were crawling in and out. It also was filled with flour. The floor was of stone, uneven and very dirty. Harbours for rats and mice, &c. in all directions.[121]

The whole environment within which the journeyman baker toiled was itself representative of a trade struggling to lower production costs as much as possible.

> Englishmen, with their good command of the Bible, knew well enough that man, unless by elective grace a capitalist, or a landlord, or the holder of a sinecure, is destined to eat his bread in the sweat of his brow, but they did not know that he had to eat daily in his bread a certain quantity of human perspiration mixed with the discharge of abscesses, cobwebs, dead cockroaches and putrid German yeast, not to mention alum, sand and other agreeable mineral ingredients.[122]

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[121] RGCJB, §§ 488, 492 (Tremenheere).
[122] Marx, *Capital*, Vol. 1, p. 359.

Sanitary conditions were the least concern for a great many undersellers as journeyman bakers 'used both hands and feet while kneading the dough, sweating as they worked', and 'washed in the water used for the next batch of dough.'[123] Such conditions were not limited to London, as Tremenheere made clear, and would indeed be found across Britain.[124]

Yet, nothing was more appalling than the working conditions under which the journeymen bakers toiled. In regards to the social composition of the trade, Tremenheere's report documented two important trends noted earlier by Guy. On the one hand, the considerable employment of youth in the baking trade was obvious in that 1,857 out of 11,580 bakers in London were aged between 15 and 20 years. By 1861, about 2,000 out of the 14,000 bakers in the metropolis were under 18 years of age, earning on average 12*s.* per week, and therefore greatly contributed to lower the value of labour-power at a time of cutthroat competition.[125] In spite of the mass employment of youth, however, most bakers in London came from Scotland, the western counties of England, and Ireland. The habit of the master bakers from these regions and countries, especially the first two, was to only employ apprentices in order to lower their labour costs and dismiss them once they were out of their time, thus throwing on the labour market a mass of unemployed bakers for whom London represented an important poll of attraction. The master bakers of London were therefore benefitting from a glutted labour market favourable to low wages and conducive to the breaking of strikes and

[123] Smith, *People's Health*, pp. 209. See also: RGCJB, p. liii.
[124] Hugh Seymour Tremenheere, 'Second RGCJB', *PP* XXVIII (1863).
[125] RGCJB, p. vii, §11 (Bennett), §479 (Cheeseman).

organisations. Yet, Scotland, which Guy considered 'the great nursery of bakers' for London, was being supplanted by German immigrants in the 1860s.[126] As John Bennett, Secretary of the London Operative Bakers Association, put it:

> The Germans, who are very numerous in the trade, come over with passports for four years, and finding it difficult perhaps to get employment in the trade to which they may have been brought up, offer themselves to the master bakers without knowing anything of the trade, and will work for very little money, in a boy's place, just to obtain a living and to acquire the language. They will seldom save money enough to go home after their four years, and if they do not, they are punishable should they return afterwards, for not taking their turn of drill under the regulations of their conscription for the army. They therefore remain here, and swell the numbers of our trade.[127]

That the great majority of them could not save enough money to go back home after four years of hard work is indicative of the brutal system of exploitation under which they served. By the early 1890s the London baking trade still attracted large proportion of immigrants, and no more than 40 percent of the bakers and confectioners in the metropolis were city born.[128]

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[126] RGCJB, §§ 356 (Heiser), 383 (Mackness).
[127] RGCJB, §81 (Bennett).
[128] Stedman Jones, *Outcast London*, p. 137.

With perhaps the exception of Birmingham and Carlisle, where steam driven machineries could be found in some bakeries, there were very few large bakery production facilities in 1850.[129] In is true that there were, in the early 1860s, about a dozen large wholesale bakeries in the metropolis where working hours were, as a rule, shorter, and a well-known firm of the West End was said to average 'only sixty-seven hours a week, including one hour a day for meals.'[130] Capitalised bakeries investing in labour-saving technologies and methods of fabrication no doubt existed before 1900, but their proportion of the trade was marginal. For the vast majority of those engaged in the trade, however, conditions of works were simply deadly. In 1860, the *London City Mission Magazine*, the propaganda organ of Christian evangelism in the metropolis, wrote about the rather unchristian, as it supposed, conditions within which 'many men died prematurely from diseases caught in the bad bakehouses'.[131] The Mission had been advocating at least since 1840 for Sunday baking in the metropolis to stop, so that those engaged in the trade could rejoice of the Sabbath. There even existed a Committee of the Sunday-baking Abolition Society lobbying the clergy and ministers of the metropolis. As it happened, they soon discovered that the Creator herself was hopeless against the almighty god of capital which took no rest, not even on Sundays.

'Many of the grievances complained of', said Tremenheere in his first report, 'are beyond the reach of legislative remedies.' Under free competition between a multiplicity of small-scale, under-capitalised bakeries, the author only made three recommendations:

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[129] Alexander, *Retailing in England*, p. 124.
[130] Charles Booth and Stephen N. Fox, 'Bakers and Confectioners', in *Life and Labour of the People*, Vol. 7, ed. Charles Booth (1896), p. 151.
[131] RGCJB, p. xix.

(1) that night work for persons under 18 should be forbidden; (2) that bakehouses should be placed under inspections and subjected to regulations; and (3) that the 1860 Food Act should be made more effectual.[132] The following year Parliament passed the Bakehouse Regulation Act, 1863, which only addressed the first recommendation. While the Act was obviously beneficial to the youth employed in the trade, it also reinforced the role of immigrants in the trade as a substitute to cheap, juvenile labour. The Act also provided for the washing and ventilation of bakehouses, and though effective inspections did not come until 1883, it nonetheless started the process of cleaning these Augean stables. Still, while Tremenheere was reporting in 1865 that in London, Manchester, Liverpool, Bristol, Birmingham, Salford, Plymouth, Nottingham and York the Act was at once complied with, there were still numerous towns such as Huddersfield, Preston, Coventry, Brighton, Ipswich, Carlisle, Leicester, Wakefield, Penzance, Derby, Cheltenham, Gloucester and Norwich where the Act remained a dead letter.[133]

Whatever sanitary improvements had been achieved since the 1863 Act, by the end of the 1870s their integrity was already compromised. The Factory and Workshop Act of 1878 repealed the Bakehouse Act and transferred the powers to enforce sanitary inspections from the local authorities to the Factory Inspectors. As the number of inspections diminished so did the overall sanitary conditions. Dr Bate, Medical Officer of Health for Bethnal-green, reported in 1882 that the bakehouses in the district were in a worse state than before the repeal. Out of 112 bakehouses, 41 were underground cellars, 58 required lime-washing the walls and roofs, 22 had unclean troughs and utensils, 35

[132] RGCJB, pp. v-vi.
[133] Hugh Seymour Tremenheere, 'Third RGCJB', *PP* XLVII (1865), pp. 3-6.

were badly ventilated, and 41 badly lighted.[134] Only a few years later, Charles Booth and Stephen N. Fox reported that 171 out of 196 bakehouses in the St. Pancras district were underground, and although now a minority, there were still plenty of bakehouses in London where the atmosphere was considered 'foetid and dangerous to health'.[135] By 1895, more than one-half of Londoners' bread still came from what the *British Medical Journal* referred to as 'dark, damp, dirty, dismal dungeons, reeking with foul air.'[136]

For the elites and most social commentators, the mechanisation of the trade was the answer, and they apparently saw no contradiction in seeking the resolution of capital's contradictions in capital itself. 'When that happens,' said Martineau, 'the image of men kneading for hours together in an underground hothouse will be regarded as a barbaric picture of the customs of the antique world.'[137] As it happened, the barbaric customs of the 'antique world' would continue unabated within the otherwise civilised manners of the brave new capitalist world. Yet, the exploitation of the journeymen bakers seemed to reveal something much more fundamental and sacred about the 'holy' nature of capitalism, and it is indeed no accident that Marx included a short exposé on the baking trade in his discussion of the production of absolute surplus-value. Marx's important contribution here was to demonstrate that such 'barbaric practices' were not antithetical to capitalist social relations of exploitation, and that the introduction of labour-saving devices as a solution to the horrors of overwork was not an automatic law

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[134] 'Bakehouses in Bethnal-Green', *The Times*, October 21 (1882), p. 10.
[135] Booth and Fox, 'Bakers and Confectioners', p. 154.
[136] George Frederick McCleary, *Municipal Bakehouses*, Fabian Tract No. 94 (London, 1900), p. 1; 'The Case of the Journeymen Bakers', *The British Medical Journal*, Vol. 2, No. 610, September 7 (1872), p. 275.
[137] Harriet Martineau, 'The baker. His Health', *Once a Week*, Nov. 10 (1860), pp. 543-4.

of capitalist development, but very much the outcome of historically specific relations of competition.

Old habits die hard, especially when labour organises. The journeymen bakers had struck in 1859 for 12 hour day, but failed. They went of strike again in 1873 for 12 hour days, the abolition of night work, and an extra 4*s.* a week, but only got 2*s.* Trying to explain the journeymen bakers' strike of 1889, *The Star* wrote: 'since the 1873 strike there has been a tendency to drift back into the old way of prolonging the hours; and probably this drifting back had reached a point which marks the limit to endurance in many instances.'[138] Johanna Lahr, a German born women who migrated to England in the mid-1880s and an active member of the Socialist League, published in 1889 a pamphlet urging the journeymen bakers, which she called 'the poorest of the wage-slaves', to follow the dockers and the tailors and strike against their masters. Decrying the 'hand-to-mouth existence' of these 'white slaves', Lahr writes:

> The journeymen bakers must admit that they are, in comparison with any other skilled workers, the poorest, the most sweated, wretched slaves; that their present condition is a most deplorable one, and a disgrace to civilisation. The extraordinary long hours, varying from 14 to 16 hours a day, for the first five days of the week, 22 hours on Saturday, and Sunday work as well, makes up an average of from 90 to 120 hours each week; and in most cases the poor wretches have to work in filthy, unhealthy bakehouses not fit for a dog, let alone a human being. These wage-slaves

[138] 'The London Bakers. Their work and their wages', *The Star*, September 26 (1889), p. 4.

are injured in health, and are broken men before they enter into full manhood; their lives cut short, and an early grave their reward.[139]

The journeymen bakers went on strike asking for a 60 hour week, but failed. By then, of the two main grievances complained of by the journeymen bakers voiced 30 years earlier and described at length by various governmental and civil reports, only the sanitary conditions of the bakehouses had been addressed, and even then not entirely successfully.

When Booth and Fox investigated the lot of the London bakers in the early 1890s, they were only able to report slight improvements in working conditions.[140] The journeyman bakers continued to toil for long hours, working between 80 and 100 hours per week to earn the right to live in poverty and die young. Night work and long hours towards the end of the week remained the norm. Immigrants were still the 'principal victims of inordinate hours', with German workers toiling for up to 112 hours per week and the Polish Jew bakers in the East End working 14 hours a day and up to 20 hours on Friday night. As the authors wrote:

The principal requisite for a journeyman baker is physical strength and a power of sustained effort under exceptionally exhausting conditions. In bread-making the men have often to keep at their task, mixing or kneading or moulding, with most of their muscles in play, for many successive hours, and where long hours prevail few

[139] Johanna Lahr, *The Poorest of the Wage-Slaves* (London, 1889).
[140] Booth and Fox, 'Bakers and Confectioners'. See also: 'Labour in Bakehouses', *The Times*, April 10 (1895), p. 4.

men can stand the strain for more than twenty years. That the men at present, in many cases, suffer in health there seems little doubt. Behind the floury whiteness of their work-a-day face lies too often the pallor of ill-health. They lack energy.[141]

There was already no doubt for Guy at the end of the 1840s that chronic illnesses and excessive mortality amongst the ranks of the journeymen bakers were caused by working and sanitary conditions. In fact, Guy had found that the average age at death of 164 bakers above 20 years of age dying in London, including masters and journeymen, was 49 years.

But master and journeyman baker are two very different classes of people. 'The former', said Arlidge in 1892, 'are mostly fat and flourishing, whilst the latter are anaemic and sallow, in general appearance worn out, and in mental features dissatisfied and despondent.'[142] By the early 1860s, the average life of the journeyman baker ended at 40.[143] And contrary to what Ogle's comparative mortality figures (Table 8) may suggest, the journeyman baker's fate had not improved.

That the labour in bakehouses is very damaging to health and shortens life is well known to the trade, and causes it to be given up whenever circumstances permit. ... In very many instances the life so transferred is a damaged one, and consequently whilst, on the one hand, its transfer enhances the mortality and sickness ration in

[141] Booth and Fox, 'Bakers and Confectioners', pp. 156-7.
[142] Arlidge, *The Hygiene, Diseases and Mortality of Occupations*, p. 145.
[143] Guy, 'Baking trade', p. 3; Martineau, 'The baker. His Health', p. 541; RGCJB, p. viii

the assumed occupation, on the other, it makes that of the abandoned trade appear less.[144]

Booth and Fox confirmed the ongoing degradation of the journeyman baker, arguing that there still was in the trade 'a very high mortality before forty-five, and an excessive proportion of deaths due to lung disease at all ages'.[145] Journeyman bakers were thin and anaemic, and Harriet Martineau's description of them as 'a pale-faced, flabby, anxious looking race' in 1860 still held 40 years later.[146] They were particularly subject to nervous and respiratory diseases and phthisis (i.e. tuberculosis), developmental maladies, skin infections such as eczema and erysipelas, flat foot, carious teeth, rheumatism, and committed suicide almost twice as much as the average rate for males from 100 different occupations.[147]

Israel Roth, Secretary of the East London Bakers' Union, examined before the Royal Commission on Alien Immigration in 1903, stated that journeymen bakers frequently worked 108, 112 and even 120 hours a week, for which the foreman received 36*s.* per week, the second hand 27*s.*, the third hand 20*s.*, and the fourth hand 17*s.*[148] That bakers remained a highly exploited group there is absolutely no doubt, and the claim made in 1840 by the Committee of the Sunday-baking Abolition Society that the journeyman baker's working week was equivalent to nine days of 'normal' work,

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[144] Arlidge, *The Hygiene, Diseases and Mortality of Occupations*, p. 146.
[145] Booth and Fox, 'Bakers and Confectioners', p. 157.
[146] Martineau, 'The baker. His Health', p. 541.
[147] Ogle, 'Supplement to the forty-fifth annual report of the Registrar-General of Births, Deaths, and Marriages in England', p. lxi; Arlidge, *The Hygiene, Diseases and Mortality of Occupations*, p. 148; McCleary, 'Municipal Bakehouses', p. 2-3.
[148] 'Royal Commission on Alien Immigration', Vol. 2, Q. 21,885-90 (Roth).

exclusive of Sundays' work, remained truthful throughout the period under review. Indeed, by 1914 a great many of them worked nearly, if not more than, twice the regular hours of wage-labourers outside the food trades, very often for lower weekly wages.[149]

The production of a cheap loaf in Victorian and Edwardian Britain was mainly accomplished, first by cheating the consumer, and second by overwork. And though the former was largely under control by the end of the 1870s, the second would continue to define the baking trade up until 1914. For tens of thousands of journeymen, then, to give their health and life in order to produce the 'staff of life' was a cruel oxymoron. 'Eating bread of which the making kills the journeyman baker is, in a manner, eating the journeyman baker himself', wrote *Punch* in 1862.[150] Here was a hungry nation consuming its cheap bread as surely it devoured the journeyman baker's life and health.

Conclusion

In this chapter I have argued that the social and economic transformations underpinning the growth of cheap food revealed the limits of shopkeepers' ability to adapt to a retailing sector increasingly geared towards mass distribution. Shopkeepers' social status and ideals of independence, autonomy, and self-help were indeed directly challenged by a race to the bottom increasingly characterised either by the costers, whose distributive flexibility and economic adaptability directly came from their chronic state of insecurity and poverty, or by large-scale retailers capable of realising economies of scale

[149] 'Sunday Baking in the Metropolis', *The London City Mission Magazine*, Vol. 5 (1840), p. 35; Smith, *People's Health*, p. 209.
[150] 'A Nicer Sort of Bread', *Punch*, April 12 (1862), p. 149.

and surviving on low profit margins and high turnover. To be sure, shopkeepers remained central to the distribution of food throughout the period under review. Political manoeuvres and associations could, and did, shield them from market fluctuations, if only for a time. One's fate was probably easier to handle in small towns, though competition for surrounding farmers, street hawkers, and market stallholders was almost omnipotent. In large towns, however, political resistance to free competition was vain, and, at least in some cases, tantamount to committing economic suicide.

Very few had the financial capacity and personal willingness to fight back through capital investments and the introduction of labour saving technologies, and the vast majority of shopkeepers chose to weather the competitive storm through labour-intensive methods. The employment of women and children, shop assistants' overwork, and the systematic recourse to unpaid family labour, especially in the case of small family businesses, became entrenched strategies of reproduction. As in the case of the costermongering class, and contrary to vast segments of the working class, most shopkeepers only survived through longer hours and declining profit margins. Here too, then, cheap food was 'produced' through declining living standards and very exploitative labour relations.

Behind the false appearance of security and composure afforded by the shopkeeper's status and class position lay fraudulent practices and highly exploitative labour relations that betrayed a retailing class engulfed in precariousness and whose status owed more to the almost systematic cheating of the working class as a whole or, later, the subjection of one segment of it through abusive labour relations. As we saw,

shopkeepers' fiercest competitors came from a new breed of large-scale retailers whose competitive edge rested primarily on their capacity to adapt, through capitalisation and mechanisation, distributive infrastructures to the new possibilities created by the development of technologies of mass circulation. To them we now turn.

6. Large-Scale Retailers

> The solid basis of the world's trade and commerce is in the ceaseless, steady buying of the consuming masses.[1]

In the last three chapters we saw how the reorganisation of the marketplace was linked to an increasingly urbanised population. The importance of this rearticulation of the market's place in people's daily lives and its spatial extension through small-scale retailers like street sellers and small shopkeepers gave the distributive system the flexibility and comprehensiveness that the new bourgeois urban order needed to grow. Such retailers were central to town life, rooted as they were in their respective communities and providing them with an impressive range of articles and services. Yet, chronic poverty, cutthroat competition and, in the case of shopkeepers, the lack of interest and ability in reinvesting hard won capital into larger premises largely explains why hundreds of thousands of them still lived a in highly precarious economic situation, almost systematically relying upon strategies of reproduction based on a flexible labour force, low wages, and long hours and overwork.

The history of large-scale retailers is almost the exact opposite. From the outset economies of scale based on capital-intensive methods of retailing were at the centre of a business model that thrived on mass distribution. Contrary to street sellers and small shopkeepers, Co-operative societies and multiple shops relied heavily upon the new possibilities offered by new technologies of transportation and the ability to realise

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[1] Percy Redfern, *The Consumers' Place in Society* (Manchester, 1920), p. 42.

important economies of scale. Vertical integration was also an integral characteristic of these growing retail empires, allowing further economies of scale by the cutting out of the middlemen. In this chapter I argue that the rise of large-scale retailers is indicative of the vital role that the distribution system plays in the politics of consumption, which I explore through a study of the Co-operative movement and multiple shops. While both were important in shaping the organisation of cheap food after 1880, they nonetheless relied on entirely different precepts. For while both shared a common concern for economic growth, the politics of consumption that informed their respective strategies revolved on entirely different normative assumptions regarding the role of consumption in society as well as its ability to implement social change.

The Co-operative Movement

Co-operation has a long history arching back to the last third of the eighteenth century. Its emergence as a post-enclosures response to heightened market dependence must be seen as a social, cultural and political phenomenon animated by a politics of consumption based on the critique of the individualistic and competitive logics associated with capitalist markets. In this respect it represents a historically specific communal expression of injustice over the substitution of impersonal, market-driven mechanisms for more traditional, paternalistic norms in the production, distribution and consumption of food. Co-operation can therefore be thought of as a way to mediate the contradictions arising between capitalist social property relations and unfettered markets, on the one hand, and a more traditional legitimising notion of rights, which Edward P. Thompson

captured in the concept of 'moral economy'. In fact, what is fascinating about co-operation is precisely its evolution in the politics of consumption, insofar as it restored a certain conception of morality in trade from within the structures and dynamics of capital accumulation. Against the individualistic competition of capitalism, co-operators opposed a 'co-operative commonwealth' animated by a desire for responsible consumption that takes into account the ways in which articles are produced.[2] In this context, the concentration of activities around the organisation of co-operative milling and flour clubs at the end of the eighteenth century was as much a refusal of the new capitalist order, rooted as it was on the uprooting and forced displacement of peasants from the land, as it was a reaction against the disintegration of previous social norms and cultural referents. To a crucial extent, then, co-operation represented one response to the problem of price fluctuations in the context of market-driven competition. In spite of its social importance, however, one should not exaggerate its political role. Most associations were small and there were probably no more than 50,000 members at the national level before 1844.[3]

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[2] Peter Gurney, *Co-operative culture and the politics of consumption in England*, 1870-1930 (Manchester and New York, 1996); Stephen Yeo (ed.), *New Views of Co-operation* (London, 1988); David B. Clarke and Martin Purvis, 'Dialectics, difference, and the geographies of consumption', *Environment and Planning A*, Vol. 26 (1994), pp. 1091-1109; Martin Purvis, 'Societies of consumers and consumer societies: co-operation, consumption and politics in Britain and continental Europe *c.* 1850-1920', *Journal of Historical Geography*, Vol. 24, No. 2 (1998), pp. 147-69.

[3] Johnston Birchall, *The International co-operative movement* (Manchester and New York, 1997), Chap. 1; G. D. H. Cole, *A Century of Co-operation* (Reddish, 1945); Martin Purvis, 'Co-operative retailing in Britain', in *The evolution of retail systems, c.1800-1914*, ed. John Benson and Gareth Shaw (Leicester, 1992), pp. 109-11.

'The Big Ben of Co-operation'

Rising from the ashes of Owenite Socialism and the Chartist inspired Co-operation of the 1820s, 1830s and early 1840s, the Rochdale Pioneers were astute pragmatists who, in 1844, introduced a series of revolutionary principles that radically departed from the early movement.[4] The main innovation of the Pioneers was the democratisation of power. Membership was opened to everyone upon the down payment of one shilling and conferred by the ownership of a £1 share, which could be bought with accumulated dividends. Furthermore, cash-only trading sought to avoid the rocky shores of credit lending upon which many early societies had foundered during the second quarter of the nineteenth century. Of course, there was always a certain degree of flexibility, especially during times of economic hardship.[5] Still, cash-only trade tended to exclude the poorest segments of the working-class from the benefits of mutuality. Another important principle was the Pioneers' commitment to providing their members with pure and unadulterated food, a remarkable moral stand at a time during which food adulteration was widely practiced by middle class grocers and shopkeepers alike. Moreover, the introduction of fixed and limited interest on capital allowed retail societies to retain the benefits of capital in order to finance their own development without allowing lenders to appropriate all surpluses. 'Up to that time', Holyoake noted, 'the

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[4] On the early history of the movement, see: George Jacob Holyoake, *The History of Co-operation in England: Its Literature and its Advocate*, Vol. 1, The Pioneer Period—1812 to 1844 (London, 1875); Sidney Pollard, 'Nineteenth-century co-operation: from community building to shopkeeping', in *Essays in Labour History*, ed. Asa Briggs and John Saville (London, 1960), pp. 74-112; Johnston Birchall, *Co-op: the people's business* (Manchester and New York, 1994), Chap. 1-2; Cole, *A Century of Co-operation*; J. F. C. Harrison, *Robert Owen and the Owenites in Britain and America: The Quest for the New Moral World* (New York, 2009[1969]); Philip N. Backstrom, *Christian Socialism and Co-operation in Victorian England* (London, 1974), pp. 11-28.

[5] Ernest Aves, *Co-operative Industry* (London, 1907), pp. 47-9.

shareholders in most places were merely multiplied shopkeepers, and they took all the profits.'[6] Finally, and most importantly for the future success of the movement, dividends—the famous 'divi'—on purchases were redistributed quarterly after interests on capital paid. Goods were sold at average market prices, with surpluses realised through the different economies of scale between buying in bulk and retail prices. Dividends averaging 3*s.* to 4*s.* on the pound were not uncommon, although 2*s.* to 3*s.* was probably the norm at the dawn of the twentieth century. In other words, dividends from 10 percent to 20 percent on market prices were generally the norm.

A strong tradition of mutuality in Lancashire, the West Riding and central Scotland proved essential to the renewal of the movement. Central Scotland was an important ferment of co-operative activities. South of Scotland co-operators were heavily concentrated in northern textile or industrial towns of the North-West, North-East and Yorkshire where regular employment in factories tended to create a more homogeneous working-class experience. By 1914 these regions accounted for more than two-thirds of the co-operators in England and Wales and three-quarters of the total retail trade.[7] Naval dockyard towns such as Plymouth, Sheerness and Southampton, railway workers in Stratford, and munitions workers at the Royal Arsenal in Woolwich also enjoyed the benefits of co-operation. Pockets of co-operation also existed in Banbury, Oxford and Reading as well as in Cambridge, Ipswich and Norwich in eastern England. By and large, however, cosmopolitan cities and ports and holiday resorts such as London, Liverpool

[6] Holyoake, The History of Co-operation in England, Vol. 2, pp. 38, 39.
[7] Gurney, *Co-operative culture and the politics of consumption in England*, p. 18; Jefferys, *Retail trading in Britain*, p. 17.

and Blackpool, the South Wales valleys, with the notable exception of Cardiff, and rural areas were 'co-operative deserts.' Casual labour, seasonal work, high rates of immigration, residential mobility, the high cost of rates, rents and buildings, and low levels of demand in rural areas tended to undermine co-operative efforts in these areas where the movement remained weak throughout our period.[8] By 1899, the proportion of co-operators to population in 15 large towns of Great Britain was one to 19, comparatively to one to 250 in London.[9]

There were societies in Bacup, Todmorden, Leigh, Salford, Padiham and Middleton in 1847, though very few of the early societies had survived the second quarter of the nineteenth century, as exemplified by the failure of stores in Leeds, Liverpool, Manchester, London and Birmingham. Yet, by 1863 the membership of co-operative societies was already over 100,000 with a combined turnover of about £2.5 million. By 1914, Britain counted 1,385 societies regrouping over 3 million members with an astonishing annual turnover of about £148 million.[10] For instance, Rochdale grew from 28 to 8,892 members between 1844 and 1876, at which point it boosted a turnover of £305,190, with profits amounting to £50,668. The same was true for stores in Halifax and Leeds with profits of £19,820 and £34,510 respectively.[11]

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[8] Holyoake, *The History of Co-operation in England*, Vol. 2, p. 32; Aves, *Co-operative Industry*; Stedman Jones, *Outcast London.*

[9] Sullivan, *Markets for the People*, pp. 217-8.

[10] Cole, *A Century of Co-operation*, p. 371; Co-operative Wholesale Society, *Annual* (Manchester and Glasgow, 1918), p. viii.

[11] Holyoake, *The History of Co-operation in England*, Vol. 2, pp. 39, 50.

Johnston Birchall has argued that the original, retail store trade grew in three ways.[12] First, the stocking of new lines of products and, later, the opening of new departments supervised by specialist managers, was the simplest method by which stores expanded. Although there was no shortage of hand-to-mouth stores, all of them invariably started with groceries and provisions for which there was both a steady demand and reliable supply. According to the demand and consuming power of their members, co-ops dealt in flour, tea, sugar, coffee, dried fruit, bacon, hams, butter and cheese, as well as manufactured goods like marmalade, biscuits and cocoa. These 'department stores for the working classes',[13] as Winstanley put it, were nothing short of co-operative temples demonstrating the power of mutuality by offering their members an impressive range of products and services such as furniture, insurance, clothes and boots, to name but a few. Larger societies with a strong membership and turnover were also able to open bakery, confectionary, and meat departments, although integration in the meat trade was almost nonexistent as each retail society bought and slaughtered its own beasts. New lines would be stocked and perishable goods such as milk and greengrocery would make their appearance. For instance, in 1907, 'the bakery of the Royal Arsenal Co-operative Society, Woolwich, turns out nearly 4,500,000 two-pound loaves yearly, equivalent to nearly £51,000, and the United Baking Society of Glasgow, a federation of cooperative stores, has a trade of £482,500.'[14] After amalgamation in 1906 between Bedminster, Briston and District, Shirehampton and Avonmouth, and Keynsham

[12] Birchall, *Co-op*, p. 47.
[13] Winstanley, *The shopkeeper's world*, p. 38.
[14] Macrosty, *The Trust Movement in British Industry*, p. 216.

societies, the newly formed Bristol Society was producing over 2.5 million quartern loaves for a total value of £66,995 in 1909, and a new, highly modern bakery was opened the next year with greater capacity.[15] Before 1914, 80 percent of total co-operative retail sales were foodstuff.[16]

The second way by which retail societies grew was the setting up of branch stores. This was done either by taking over smaller societies or under the pressure of populations in outlying areas. As Ronald Jones notes in his study of co-operation in Edinburgh, changes in the national structure of retailing as well as evolutionary trends within the co-operative movement itself must be understood in relation to the democratic organisational structure of a co-operative society.

> In Edinburgh, these policy-makers did not always come to decisions on commercial considerations alone. They fell out among themselves; they complained about van deliveries; they quarrelled with their committee, and agonized over dwindling dividends; and by the end of the century, too, they could show a ruthless disregard for the commercial future of small neighbour societies. And all these, in their different ways, helped toward decisions on where to open shops.[17]

The stabilisation of working-class neighbourhoods through the rise of more stable forms of employment, rising standards of living, the development of intra-urban means of

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[15] Edward Jackson, *A study in democracy: being an account of the rise and progress of industrial co-operation in Bristol* (Manchester, 1911), p. 475. The 'quartern loaf' weighted approximately 4.33 pounds.
[16] Jefferys, i, p. 17.
[17] Ronald Jones, 'Consumers' Co-Operation in Victorian Edinburgh: The Evolution of a Location Pattern', *Transactions of the Institute of British Geographers*, New Series, Vol. 4, No. 2 (1979), pp. 303-4.

transportation, and the steady growth of new structures of retailing and wholesaling tended to rationalise the spatial dispersion of retail stores through amalgamations. The average number of members per society rose from 564 to 2,205 between 1881 and 1914, while the number of distributive societies, after reaching its peak in 1903, started its long-term secular decline.[18] For instance, through amalgamation, St Cuthbert's Co-operative Association of Edinburgh went from 1,310 members in 1879 to 20,000 members at the turn of the century, making it the largest retail co-operative society in Scotland and the fourth largest in the United Kingdom.[19] Some greatly benefitted from these rationalisations, with the Keynsham Society, before its amalgamation in the Bristol Society, described as '"hand-to-mouth" dealers.'[20]

Table 9 Progress of the C.W.S., 1864-1914

Year	Shareholders Members	Share Capital	Net Sales	C.W.S. Production	Net Surplus
1864	18,337	2,455	51,875	—	306
1865	24,005	7,182	120,754	—	1,850
1870	89,880	19,015	677,734	—	7,626
1875	249,516	78,249	2,247,395	6,409	26,750
1880	361,523	146,061	3,339,681	118,598	42,090
1885	507,772	234,112	4,793,151	171,521	77,630
1890	721,316	434,017	7,429,073	341,277	126,979
1895	930,985	635,541	10,141,917	963,805	192,766
1900	1,249,491	883,791	16,043,889	2,264,088	289,141
1905	1,635,527	1,307,341	20,785,469	3,543,501	304,568
1910	1,991,576	1,740,619	26.567,833	6,581,310	462,469
1914	2,336,460	2,130,959	34,910,813	9,051,646	840,069

H. Lincoln Jennings, 'The Co-operative Wholesale Society Ltd', *Annals of Public and Cooperative Economics*, Vol. 20, No. 1 (1849), p. 31.

[18] Cole, *A Century of Co-operation*, p. 371.
[19] Jones, 'Consumers' Co-Operation in Victorian Edinburgh', pp. 295, 301.
[20] Jackson, *A study in democracy*, pp. 318, 350, 353.

The third and probably most important way by which the co-operative movement grew was through wholesale trading. Introduced in the 1850s with mixed success, the Companies Act of 1862 gave the movement the legal basis to expand through limited liability, which it did by founding the Co-operative Wholesale Society (CWS) in 1863 and its Scottish (SCWS) counterpart in 1868. Wholesale societies were federations of member societies for the wholesale purchase, distribution and production of commodities with the clear mandate to realise economies of scale for the exclusive benefit of co-operative stores, which remained entirely free to buy on competitive markets. The repositioning of the co-operative idea at a different scale through a loose federative structure dramatically extended the movement's ability to cut out the middlemen, and gave co-operators considerably more control over the organisation of the distributive chain. Quickly outgrowing the capacity of local and regional suppliers, wholesale societies were increasingly capable of influencing larger suppliers, specialist wholesalers, and food processors and manufacturers. From then on, and in parallel with its expansion into production, the co-operative movement resolutely entered into a phase of vertical integration.

Wholesale societies were clearly linked to larger structural and technological changes within the distributive environment. As railways and steamships opened new possibilities for the mass movement of commodities in space, they also offered the infrastructure for a nascent breed of large-scale retailers. The expansion of the CWS was phenomenal (Table 9). Its annual turnover rose from £51,857 in 1864 to about £35

million in 1914. By then, more than 25 percent of its net sales came from co-operative production. For the remaining 75 percent bought on competitive markets, the CWS could count on a small battalion of buyers and salesmen stationed in Manchester, London, Cork and New York organising the wholesale purchasing and shipping of food goods. The CWS owned a whole series of home, foreign and colonial depots, whose location and opening year reveal important trends in the evolution of food sourcing.[21] Meanwhile, the CWS extended its capacities by investing £20,000 in 1887 in the construction of the Manchester Ship Canal, which opened on January 1, 1894.[22] That the movement primarily sought to realise economies of scale by cutting out the middlemen was also seen in the purchase of numerous vessels.[23] By 1914, co-operators' diet was composed of imported food from every continent except Antarctica!

The move into production by the Co-operative movement was also quite remarkable, and the CWS and the SCWS came to produce an impressive range of goods ranging from boot and show, brush, drapery, tobacco, underclothing, furniture, hosiery, ironworks, shirt, mantle, paint, soap, candle, printing, and many others. Food preparation,

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[21] Ireland characterized the early phase with the opening of depots in Tipperary (1866), Kilmallock (1868), Limerick (1869), Armagh (1873), Waterford (1873), Tralee (1874) and Cork (1877). The establishment of forwarding depots in Garston (1879) and Goole (1879), as well as the opening of depots in Bristol (1884) and Longton (1886), marked an important step towards greater distributive capacities in handling growing food imports. The establishment of depots in New York (1876), Rouen (1879), Copenhagen (1881), Hamburg (1884), Aarhus (1891), Montréal (1894), Gothenburg (1895), Denia (1896), Sydney (1897), Odense (1898), Esbjerg (1905), Makene (1913), and Accra (1914) reflects the international sourcing of the co-operative movement, and in this sense reflects wider trends within British society towards food import dependency.

[22] This amount, however, though impressive on its own, represented only 0.14 percent of the £14 million necessary for the construction of the canal.

[23] The S.S. *Plover* (1876), resold in 1880; the S.S. *Pioneer* (1879), the first merchant vessel to reach Manchester from overseas through the Manchester Ship Canal; the S.S. *Cambrian* (1881); the S.S. *Unity* (1883), which run down and sunk in River Seine in October 1895; the S.S. *Progress* (1884); the S.S. *Federation* (1886); the S.S. *Equity* (1888); the S.S. *Unity II* (1902); the S.S. *Fraternity* (1903); and the S.S. *New Pioneer* (1905).

however, represented the most significant sector. In 1873 the CWS bought Crumpsall Biscuit Works and started to produce biscuits, sweets, currant bread and the like. The manufacture of cocoa and chocolate and pepper grinding commenced in 1887, and bacon factories were purchased in Herning, Denmark, in 1900 and Tralee, Ireland, in 1901. From the early 1890s on, the CWS moved more seriously toward large-scale corn-milling, beginning at Dunston on Tyne and slowly growing into one of the world's biggest mills.[24] The CWS soon diversified into agricultural production, acquiring land and buildings to grow plums, tomatoes, cucumber, apples, gooseberries, potatoes, peas, onions, grain, strawberries, raspberries and currants. By 1914 the CWS had extended its activities to cattle breeding at home and acquired tea estates in Ceylon.[25] In addition to bread, corn and meal milling, preserves and confectionery, a whole series of factories, creameries and estates produced bacon, sweets, biscuits, butter, margarine, flour, tea, fruit and vegetables, ground spices, candied peels, mincemeat, vinegar, sauce, pickle, cocoa and chocolate, fish curing, milk, bottled and canned fruit, lard refinery, and jellies.

There is no doubt that with total retail sales rising from £27.5 million in 1882 to £147.5 million in 1914, co-operation represented a growing source of anxiety for its competitors from whom it had withdrawn a large amount of trade. 'The greatest injury to the Eastgate Market', said George Sheffield Blakeway, town clerk of Gloucester, 'is the Co-operative Society here, who do an immense business; 90 per cent of the co-operative people are market-going people.'[26] In Bolton, Kirkman admitted, 'there is no doubt that

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[24] Percy Redfern, *The Story of the C.W.S.: The Jubilee History of the Co-operative Wholesale Society Limited, 1863-1913* (Manchester, 1913), Chap. 21.
[25] Redfern, *The Story of the C.W.S.*, pp. 207-14.
[26] RCMRT, Vol. 3, Q. 13,357-8 (Ward).

the co-operative movement in the town, which is very powerful, has injured the market hall in its retail business to a certain extent.'[27] Arguably, the market hall never recovered as co-operators claimed 75 per cent of the town's trade by 1909; that same year, in St Helens, half the town's families were said to be members of the co-op. The importance of co-ops in the retail trade was such that the proportion of national salary spent in them rose from 4.2 percent in 1880 to 11.4 percent in 1913.[28]

Capitalism, Co-operation, and the Limits to the Politics of Consumption

This 'democracy in business' or 'republic of consumers' was not without its own contradictions.[29] As Holyoake revealingly put it, the dying body of the early co-operator would not have survived 'if the solid-headed and sagacious men of Rochdale had not discovered the method of *feeding it on profits*—the most nutritious diet known to social philosophy.'[30] The same idea was captured by Abraham Howarth, president of the Pioneers' Society, who declared in 1860 that the movement joins 'together the means, the energies, and the talent of all for the benefit of each' by 'a common bond, that of self-interest.'[31] By taking the public into partnership, the Pioneers offered a bold and pragmatic solution to the early desperation and social misery of the early 1840s, harnessing the growth of the movement to consumers' self-interest. As Sidney Pollard

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[27] RCMRT, Vol. 7, Q. 13,130 (Kirkman).
[28] Benson, *The Penny Capitalists*, p. 124.
[29] Redfern, *The Story of the C.W.S.*, p. 223. For a thorough discussion on the contradictions between socialism and co-operation, see: Gurney, *Co-operative culture and the politics of consumption in England*, Chap. 7.
[30] Holyoake, *The History of Co-operation in England*, Vol. 2, p. 9.
[31] Pollard, 'Nineteenth-Century Co-operation', p. 98.

has argued, the Rochdale Pioneers marked an important transition from the early co-operative movement founded upon community building to a reformist, morally based approach to shopkeeping.[32] Rising food prices from 1896 onwards triggered the contradictions inherent to the movement, although the movement would continue to grow. And while one cannot reduce the Co-operative movement to mere economic calculations without running the risk of reifying its purpose,[33] it seems hard to avoid the conclusion that for many, co-operation was the vehicle to an end, rather than the end itself.

Co-operators' loyalty had always been a source of preoccupation. Even after the opening of a CWS branch of Newcastle in 1872, which quickly became the largest single supplier to retail societies in north-east England, over one-third of the societies were not shareholders and thereby continued to get all of their supplies from competitive markets. And while the annual turnover of the CWS with north-eastern co-operators increased from £203,083 to £596,201 between 1872 and 1877, it represented by then no more than a quarter of the goods purchased by these societies.[34] Already in the 1860s, co-operative stores could count on an extensive network of 'discerning and friendly dealers' in Newcastle, Glasgow, Greenock, London, Leeds and Liverpool for their grocery and provisions.[35] Societies did not hesitate to use several competing firms to obtain their grocery and provisions, and it seems that 'the majority of co-operators subscribed to a

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[32] Pollard, 'Nineteenth-Century Co-operation', pp. 77-83.
[33] Gurney, *Co-operative culture and the politics of consumption in England*, pp. 22-3; Martin Purvis, 'Stocking the store: co-operative retailers in North-east England and systems of wholesale supply, circa 1860-77', *Business History*, Vol. 40, No. 4 (1998), p. 55.
[34] Purvis, 'Stocking the store', pp. 67-8. See also: Redfern, *The Story of the C.W.S.*, p. 74; Holyoake, *The History of Co-operation in England*, Vol. 2, p. 154.
[35] Holyoake, *The History of Co-operation in England*, Vol. 2, p. 103.

more limited vision of the practical utility of their own store as a collective endeavour rooted in the immediacy of their particular community'.[36] That retail stores continued to rely extensively on competitive markets is demonstrated by the fact that between 1881 and 1914 total wholesale to retail sales in the United Kingdom rose from about 23 percent to 43 percent, thus leaving about £60 million to capitalist markets.[37] By way of comparison, 52 percent of Scottish co-operative retail sales came from the SCWS, thus suggesting that the ratio between wholesale and retail sales in England and Wales was below 40 percent.

There were, of course, important variations. In 1909, the Bristol Society purchased no less than 77.7 percent of its supply from the CWS.[38] At the Murton Colliery Society in Durham, average purchases per member per year amounted to an impressive £55 in 1905, £33 at Gateshead and Burnley, £20 in Woolwich, and £18 in periphery of Plymouth.[39] But as George D. H. Cole has argued, we 'see real trade per head rising during the period of falling retail prices which ended in 1896, and then, after a few years of minor oscillations, falling off sharply from 1901 to 1919.'[40] This suggests that rising food prices after 1896 forced many co-operators either to curb their living standards in order to stay loyal to the movement, or to shop around for the best bargains. Since dividends were a temporally differed discount on goods sold at average market prices, this meant that dividends paid quarterly in the context of falling food prices between 1873 and 1896 tended to have a greater value or purchasing power. The flipside was that

[36] Purvis, 'Stocking the store', p. 70.
[37] CWS, *Annual*, pp. xvi.
[38] Jackson, *A study in democracy*, pp. 586-7.
[39] Aves, *Co-operative Industry*, pp. 66-9.
[40] Cole, *A Century of Co-operation*, p. 374.

after 1896 dividends tended to lose part of their value, thus creating a situation where, from a purely economic point of view, consumers were likely to benefit from taking advantage of the best bargains immediately. That co-operators were 'shopping around' is implicit in Table 10 given that total membership of consumers' co-operation in Britain more than doubled between 1896 and 1914.

Yet, growing anxiety over what Ernest Aves called the 'disorganized buying' and lack of loyalty of 'the comparatively well-to-do workingman's wife' looking for cheap bargains was real enough.[41] It is indeed interesting to note that Aves' accusation is directed against a very specific class of housewife, further highlighting the central role played by women in household management and the social, political-economic and cultural dilemma they faced in trying to reconcile the conflict between the capacity of the household budget to command a certain basket of goods and the social pressure, in spite of political beliefs and cultural habits, to bring their customers to the co-op. At any rate, the choice between taking advantage of cheap bargains in the competitive markets in order to maintain standards of living and the choice to lower them by shopping at the co-operative store by solidarity was unlikely to resolve the main contradiction facing co-operators.

'Rochdale', declared Holyoake in *The History of Co-operation*, 'was in some sense the Big Ben of Co-operation, whose sound will long be heard in history over that of many other stores.'[42] By 1914 there could be no doubt that the movement that arose out of the Rochdale's principles had helped millions of working-class people to buy themselves out

[41] Aves, *Co-operative Industry*, pp. 63-4, 176.
[42] Holyoake, *The History of Co-operation in England*, Vol. 2, p. 15.

of poverty. Economies of scale, dividends and vertical integration combined to create one of the most powerful organisations in the British food distribution system, and the benefits of mutuality remained strong up to the end of our period. Yet, it was the inability of the movement to go beyond the politics of consumption and to seriously undermine capitalist social property relations that ultimately weakened it. With the exception of the bread and flour confectionery trade, co-operative production never accounted for more than a tiny fraction of its sales, and therefore never fundamentally challenged the capitalist nature of the supply system upon which its expansion rested. At the same time, Co-operative culture and the politics of consumption were not insulated from larger capitalist structures. Indeed, the growth of the movement was only made possible through capitalist infrastructures of production and technologies of circulation, which by the same token put pressure on the distributive system by fuelling cutthroat competition. This is not, however, an attempt to downplay the breathtaking accomplishments of the movement. But one must recognise that Co-operation and capitalism were not mutually exclusive.

Table 10 Estimated shares in selected food trades, 1900-1915

	Groceries and provisions			Bread and flour			Meat		
	Co-ops	Multiples	Others	Co-ops	Multiples	Others	Co-ops	Multiples	Others
1900	15.0	5.5	79.5	4.0	0.5	95.5	4.0	5.8	90.3
1905	16.0	7.5	76.5	5.3	1.0	93.8	4.8	8.5	86.8
1910	17.0	10.5	72.5	7.0	2.0	91.0	5.0	11.8	83.3
1915	18.0	13.0	69.0	8.0	3.8	88.3	6.5	10.3	83.3

Source: Jefferys, *Retail trading in Britain*, pp. 163, 201, 223.

Multiple Shops

Almost nonexistent in 1880, the scale and scope at which they operated three decades later was such that they in fact had dramatically altered the distributive environment and changed the ways in which people obtained their food. Like co-ops, the rise of multiple shops or multiples relied heavily upon its ability to take advantage of the new infrastructure supporting the mass circulation of goods. As Jefferys explained, it was the 'radical changes in the volume and character of the goods and in the type of demand [that] led to widespread developments in the organization and structure of the grocery and provisions trade in the second half of the nineteenth century and the early decades of the twentieth.'[43] Multiples represented nothing short of a revolution in retailing, fuelled as their rise was by product innovation, improvements in transportation and storage facilities, and the constitution of a mass market for a more affluent working-class.

Multiples were capital-intensive ventures with the sole objective of making profits. They operated on an aggressive price-cutting policy of small profits and quick returns on high volume.[44] Like co-operative stores, multiples realised economies of scale by negotiating discounts with their suppliers on bulk turnover as well as through vertical diversification 'into production to reduce costs and to ensure regularity and consistency of supply.'[45] Thomas Lipton's rule of 'abolishing, wherever possible, the middle-man or intermediary profiteer between the producer and the consumer'[46] neatly captures the

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[43] Jefferys, *Retail trading in Britain*, p. 129.
[44] Gareth Shaw, 'The evolution and impact of large-scale retailing in Britain', p. 153.
[45] Winstanley, *The shopkeeper's world*, p. 244.
[46] Lipton cited in Peter Mathias, *Retailing Revolution: A History of Multiple Retailing in the Food Trades based upon the Allied Suppliers Group of Companies* (London, 1967), p. 328.

importance of vertical integration in a distributive environment mired in excessive competition. Moreover, multiples' capacity to increase the velocity of distribution and cut labour costs through the introduction of more efficient methods tended to heighten 'the process of de-skilling the shop labour force as management practices standardised the work routines of most shop assistants'.[47]

Table 11 Number of multiple shop firms with 10 or more branches, 1875-1915

	Grocery and provisions		Meat		Bread and flour		Milk		Chocolate and sugar	
	Firms	Branches	Firms	Branches	Firms	Branches	Firms	Branches	Firms	Branches
1875	6	108	-	-	-	-	-	-	-	-
1880	14	277	-	-	-	-	-	-	-	-
1885	31	688	5	200	-	-	-	-	-	-
1890	46	1265	8	564	-	-	-	-	-	-
1895	72	2239	11	1253	-	-	-	-	-	-
1900	80	3444	13	2058	8	105	8	101	-	-
1905	96	4429	17	2982	16	261	15	203	5	163
1910	114	5870	23	3828	21	451	20	324	10	308
1915	125	7130	27	3675	26	628	23	401	15	496

Source: Jefferys, *Retail trading in Britain*, pp. 137, 187, 214, 232, 257.

Table 11 shows estimates of the number of multiple shop firms in the main food trades.[48] The table is informative in many ways. First, it clearly demonstrates the evolution of multiples over time, the pace of expansion, and the rather comprehensive range of food commodities sold by multiple shop retailers. The centrality of the grocery and provisions and meat trades attest to the importance of developments in transportation

[47] Shaw, 'The evolution and impact of large-scale retailing in Britain', p. 159.

[48] Jefferys (*Retail trading in Britain*, p. 465) defines a multiple shop organization 'as a firm, other than a Co-operative Society, possessing 10 or more retail establishments. ... The definition adopted, however, also has some economic justification in that in most trades significant economies of scale were not present until a firm operated from at least 10 branches.' This discussion therefore excludes small-scale multiples with two to nine shops, unless they became large-scale multiples (10 or more) before 1915.

technologies, storage facilities, and the standardisation of production. Second, the slow development in the bread and flour trade confirms the chronic problem of excessive competition and Britain's dependence, at least until the late 1890s and early 1900s, on imported flour.[49] Finally, the absence of multiple shop firms in the fruit and vegetable and fish trades, as well as their relatively sparse presence in the milk trade, confirms and indeed reinforces the widely accepted view that large-scale retailers tended to avoid dealing in the more risky business of perishable goods.

Thomas Lipton's success perhaps best exemplifies the growing importance of multiples in food distribution. He opened his first shop in 1871 and by 1878 Lipton had four shops with a combined weekly turnover of 6,000 ham, 16 tons of bacon, 16,000 dozen eggs, 10 tons of butter and 200 blocks of cheese.[50] The introduction of tea in 1889 represents the beginning of a highly dynamic decade of economic growth and development culminating with incorporation in 1898. By that time, the company had over 400 shops (242 in Britain) and 10,000 employees worldwide. Four million pounds of tea were sold the first year Lipton moved into the trade, and six million pounds the next year. At the end of the decade, 50 tons of tea was moved out every day from the City Road premises in London, which represented a staggering annual turnover of over 40 million pounds. In spite of some successes in the meat trade in the United States between 1880 and 1902, Lipton's most important diversification scheme remained its acquisition of tea plantations. In 1890 Lipton went to Ceylon and spent £20,000 on large warehouses and

[49] Richard Perren, 'Structural Change and Market Growth in the Food Industry: Flour Milling in Britain, Europe, and America, 1850-1914', *The Economic History Review*, New Series, Vol. 43, No. 3 (1990).
[50] Mathias, *Retailing Revolution*, pp. 96-124, 328-52.

offices in Colombo, and seven estates totalling over 3,000 acres worked out by more than 3,000 coolies. More plantations were later added, their value in 1914 being estimated at between £500,000 and £800,000. Yet, they produced only a fraction of Lipton's total retail sales of tea, the firm's relation with Ceylon remaining far more important as a buyer than as a grower.

Warehouses in Glasgow, Liverpool, London and Dublin assured national distribution, as many reminders that Lipton's rising economic empire not only rested on cheap imports, but also on a complex and elaborate infrastructure of distribution. High volume, fast turnover, growing vertical integration, and aggressive advertising campaigns gave the company an important competitive edge – low prices. The tea sold by family grocers at 3*s.* to 4*s.* per pound could hardly compete against Lipton's own blends at 1*s.* 2*d.* to 1*s.* 9*d.* Butter, usually sold at 1*s.* 8*d.* per pound, retailed at 1*s.*, and bacon, ham and jam were all half price. Lipton's commitment to vertical integration was, however, anything but new. Already in the late 1870s Lipton had drying and curing capacity for 15,000 hams and smoking rooms for bacon, to which were later added sausage and pie manufacturing, as well as a large bakery to supply cakes and biscuits to his shops. Lipton carried this commitment with him when he moved the company headquarters from Glasgow to London in 1891, bringing with him coffee roasting, grinding and essence-making, sausage-making, and a bakery for pork pies and sausage rolls. Ham and bacon curing capacities were extended and diversification into production continued unabated. Jam production began in 1892, six plum farms were purchased in Kent in 1894, and a confectionery factory was opened in 1895. By 1898, shops were stocked with Lipton's

manufactured cocoa, chocolate, confectionery, jams, marmalade, preserved fruits, pickles, preserved meats, sauces, biscuits, cakes, coffee and cocoa essence, beef extract and fluid beef.

Contrary to Lipton, Home and Colonial Stores developed primarily in groceries.[51] Avoiding co-operative competition, Home and Colonial was a 'southern phenomenon' with only 10 branches in Lancashire in the first decade of the twentieth century and about 200 in London and its suburban areas. Despite the establishment of a small factory for the production of custard and blancmange powders, jellies and similar goods in 1912, as well as holdings in Albers Creameries Ltd of Dordrecht to secure the cheap production of margarine, Home and Colonial remained largely uninterested in production. Bulk orders were in the hands of a few very large merchants until the development of integrated wholesale trade in its main lines from 1904 on. At the retail level, the company developed along two lines: a few large stores stocking a wide variety of lines, and a larger number of smaller shops – known as 'tea stores' – handling high turnovers in tea, sugar, butter, margarine and cheese. Cheap imported butter soon replaced tea as the principal staple of trade; arguably, the practice of blending butters to obtain different colours and degrees of saltiness in order to satisfy regional traditions and tastes must also have played into its success. By 1905, no less than 70 tons of margarine were sold weekly. Incorporated in 1888, continuous capitalisation allowed the financial basis for expansion, with the number of shops rising from 107 to 500 between 1890 and 1903 (Table 12). Annual profits reached £220,000 in 1901 before declining to £150,000 in

[51] Mathias, *Retailing Revolution*, pp. 125-147.

1908. Home and Colonial then moved into the provisions trade and widened the numbers of grocery lines stocked, the distinction between large and small stores increasingly vanishing as smaller shops stocked new commodities like cocoa essence, coffee, Worcester sauce, table jellies, custard, blancmange, baking powder, treacle, self-raising flour, tinned milk, jam and many others. By 1914 annual profits had jumped up at £300,000.

Like other retail firms, the Maypole Dairy Company expanded through specialisation in a narrow range of mainly imported commodities.[52] The first shop was opened in 1887, and in 1898 there were 105 of them. That same year it amalgamated with the Medova Dairies, which brought 80 shops with it. Maypole now claimed 185 shops geographically dispersed in Lancashire, Cheshire, South Scotland, South Wales, Warwickshire, Yorkshire, and few Midland Counties. Capitalised at £923,000, the meteoric expansion of Maypole was astounding, with shops numbering 958 in 1915. Strategically avoiding locking capital up in property, shops were usually located in high density shopping areas of high streets on leasehold. Declining profits in butter *c.*1900 provided the basis to heighten trade in more profitable commodities like eggs, tea and margarine. As rising food prices put pressure on working-class standards of life, margarine's commercial advantage over butter increased. Maypole was still conducting an important trade in butter with an annual turnover of £1,500,000 in 1906 (95 percent of which was imported from Denmark), though the rising popularity of margarine was undeniable. After substantial investment, Maypole had a weekly production of about

[52] Mathias, *Retailing Revolution*, pp. 165-91.

1,000 tons of margarine in 1913, ahead of its two closest competitors, Van der Berghs (680 tons) and Jurgens (480 tons). During these years Maypole was also developing oil-milling and oil refinery capacities to further expand its control over the international oil and fat markets, with open intention to develop the West African trade. By 1913, the firm sold 1,445 tons of eggs, 3,450 tons of condensed milk, 9,550 tons of tea, 14,000 tons of butter, and, in 1914, 48,000 tons of margarine. At that point, Maypole's share of the national market in tea amounted to 7 percent, 6.7 percent in butter, and 33 percent in margarine.

Table 12 The capitalisation of large-scale retail firms, 1907

Company	Capital (£)
Lipton	2,500,000
Home and Colonial	1,200,000
Maypole	923,000
Eastman	1,126,490
Nelson	601,434

Source: Macrosty, *The Trust Movement in British Industry*, p. 201.

Contrary to the grocery and provisions trade, which expanded to secure their sources of supply, the growth of multiples shop firms in frozen and chilled meat tended to be the outcome of packing and shipping interests seeking to guarantee outlets for their rapidly expanding trade, especially at a time during which skilled butchers showed little desire to handle it. As Jefferys has argued, the rise of large-scale retailing in meat was owed to 'the replacement of sailing ships by steamships, the development of refrigeration and refrigerator ships, and the low prices of imported compared with home-killed

meat.'[53] Common to both the grocery and provisions trade and the meat trade, however, was an active tendency towards vertical integration in order to gain market share through lower prices. An important prejudice existed against frozen and chilled meat, which, like margarine, tended to be associated with a poverty-stricken diet. But prices were low and the growing quality of the meat as a result of improving freezing and chilling technologies secured an expanding trade, with its popularity reaching wide sections of the working classes in 1914.

John Bell & Sons from Glasgow, which specialised in American dead meat imports, had over 100 shops in 1885. The competition between home and foreign killed meat was particularly acute given the rapid expansion of the dead meat market in large towns. Many wholesale butchers in Glasgow complained before the RCMRT that whereas they had to pay dues of 1*s.* on every bullock taken into the dead meat market, private companies importing dead meat and stocking it into their refrigerators at Cheapside – also known as Broomielaw – escaped these dues, bypassing entirely the dead meat market by selling into private shops. In fact, the number of dead American carcasses brought to the dead meat market declined from 12,992 to 449 between 1880 and 1888.[54] Anxieties over the growing distributive role of multiples in the trade did not fade away with the amalgamation of John Bell with the American firm T. C. and Joseph Eastman in 1889 to form Eastman's, Ltd. With James Nelson and Sons, Ltd., Eastman dominated the

[53] Jefferys, *Retail trading in Britain*, pp. 181-2.
[54] RCMRT, Vol. 7, QQ. 12,446-62 (Hetherington, McIntyre and Mahony).

market throughout the years, James Nelson controlling 1,500 shops and Eastman 1,400 in 1912, as well as storage facilities, refrigerated ships, and packing plants.[55]

Other important companies included the British-owned, British-managed, and Argentina-incorporated River Plate Fresh Meat Company, Ltd., the London Central Meat Company, Ltd.; W. & R. Fletcher, Ltd., which operated meatpacking plants—primarily lamb—in Australia and New Zealand, had interests in South America, and owned extensive cold store plants in Britain; the Argenta Meat Company, Ltd., the New Zealand Mutton Company, Ltd., and, finally, the Direct Supply Meat Company Ltd. Together, they controlled over 90 percent of existing multiple shops in the meat trade. London Central owned 500 shops by 1912, the River Plate and W. & R. Fletcher over 400 each, and the Argenta, founded in 1899, had over 100 shops by 1910. With the rapid expansion of the frozen and chilled meat trades, both the Union Cold Storage and the International Cold Storage, two firms specialising in transportation and storage, rapidly expanded their facilities and activities.[56]

Retailing shops tended to be very small and unsophisticated, and more often than not were located in side streets to lower costs, some even consisting of a stall or barrow in the market. Dealing exclusively in cash, they avoided both credit and delivery. The whole retailing environment fostered by multiple shops in the meat trade was geared towards low prices and high turnover. Shops also tended to be geographically concentrated in London, the Midlands, and parts of Lancashire around Liverpool, distributed as they were around the main ports and cold storage facilities. From the late

[55] Critchell and Raymond, *A history of the frozen meat trade*, pp. 208-10.
[56] McNamee, 'Trends in Meat Consumption', p. 84.

1890s on these firms were facing an increasingly difficult conundrum, for while their cheap meat was more and more appreciated by the working class in the context of rising prices, it also put pressure on them to absorb at least part of the rising costs through lower profit margins in order to secure the loyalty of a growing number of new customers. This sparked a search for rationalisation, first through the maintenance of fewer and larger shops to reduce overheads, and second through amalgamations. The acquisition of W. & R. Fletcher by Union Cold in 1911 was followed by the merger of James Nelson and the River Plate in 1914 to form the British and Argentine Meat Company, Ltd.

Conclusion

In spite of their rising importance, however, large-scale retailers remained marginal to the ways people obtained their food (Table 10). Public markets, street sellers and small shopkeepers remained vital distributive institutions of food provisioning, and continued to play a central role in the ways in which people and communities organised their reproduction. Costermongers, small shopkeepers and market stallholders were no contradictions. Nor was the co-existence of both labour- and capital-intensive methods of accumulation in the food trades an anachronism. Rather, their complementarity suggests the existence of a spectrum of labour practices and relations within the food retail sectors.

Still, the emergence of a new breed of large-scale retailers in tune with the mass circulation of food commodities through developments in transportation and preservation technologies was dramatically altering the ways in which people accessed their means of subsistence. Indeed, larger structural trends towards a capital-intensive distributive

system organised around mass consumption, high turnover, standardised manufactured products, new organisational capacities in handling large volume, and the de-skilling of the labour force were increasingly characteristic of the retail environment. Co-operative stores and multiples catered for the masses by offering low prices on items for which there was high demand either through negotiated discounts with suppliers on bulk purchases or vertical diversification into production, something that smaller retailers could only have dreamt of. Like no one else, large-scale retailers fostered the acceleration of distribution time, therefore reinforcing the overall competitive environment that underpinned the mass supply of cheap food.

7. Railways in an Age of Mass Food Imports

> It becomes obvious that the great carrying question is a food question. The carrier is little less important than the producer; for whether he make use of road or rail, of sail or oar, of screw or paddle, any improvement in his means of transport is equivalent to so much additional food placed within reach of the inhabitants of a great city.[1]

By 1850, large towns in Britain were still heavily dependent on their immediate surroundings for perishable commodities such as fruit, vegetables, milk, fish, and meat. Articles with a longer marketing life, such as cereals, cheese or livestock moved on the hoof, usually came from farther afield. Important demographic change towards urban centres increased the number of people dependent upon the market to purchase their means of subsistence. This put enormous pressure on a town's food supply, and was further complicated by the time-scales of different food commodities, especially perishable articles. The notion of 'time-scale' is particularly interesting here because it captures the complexities associated with the growth of urban centres and the tensions arising from existing geographies of production. The intricate symbiosis between the time, space, and scale of food relations created immense logistical problems. Of course, contemporaries were all too aware of the challenge. 'The extent of soil by which great cities are supplied with perishable articles of food', said Dionysius Lardner, 'is necessarily limited by the speed of transport.'[2] Dodd showed the same awareness, noting

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[1] Dodd, *The Food of London*, p. 103.
[2] Dionysius Lardner, *Railway Economy: A Treatise on the New Art of Transport* (London, 1850), p. 13.

that the 'increased speed of transport not only increases the quantity of available produce, but tends to preserve the quality'.[3]

In a capitalist economy where the vast majority of the people are dependent on the market to obtain their means of subsistence, speedier and more efficient means of transportation are essential not only to deliver mass quantities of food, but also to preserve the quality and overall integrity of the products conveyed. The mass consumption of food commodities essential to every urban agglomeration required not only the mass distribution of goods, but also their mass circulation. In this, the capitalisation of space-time relations proved fundamental to the repositioning of food relations, on a scale sufficient to overcome existing spatial limits with regard to the movement of foodstuffs. As we saw, insufficient food supplies during the middle decades of the nineteenth century not only tended to force food prices up, but also created a structural incentive for the mass adulteration of food in the context of an important retail competition. Few technological developments have captured the Victorian mind and imagination as have railways,[4] and few subjects have attracted more institutional attention, parliamentary debates or inquiries. Thousands upon thousands of pages of interviews and countless reports speak to the vertiginous anxiety arising from the new possibilities and problems emerging from the acceleration of movement in space with the introduction of railways. Parliament showed an indefectible support to the establishment of a legal framework capable of aligning railway developments with the nation's stiff commitment to free trade policies. While the expansion of railway systems in the 1840s,

[3] Dodd, *The Food of London*, p. 116.
[4] Michael Freeman, *Railways and the Victorian Imagination* (New Haven and London, 1999).

1850s, and 1860s contained, rather than solved, the problems associated with widespread malnourishment, it established the basis upon which the full benefits of mass food imports could become possible. As the ongoing battle between the providers of railway services and their users suggests, people increasingly came to perceive the railway industry as a capital-intensive, profit-oriented undertaking, with the obligations and duties of a public utility.[5]

This revolution on rail carried more than the powerful forces of fixed capital in its movement. Certainly, it conveyed mass quantities and volumes of foodstuffs over long distances quickly and efficiently, and therefore contributed to the creation of a more reliable environment of distribution, operating at a scale sufficient to support the mass circulation of food goods. But more fundamentally, it profoundly reshaped the ways in which people related to their surrounding environment, as it tore apart previous notions of space and time. In this chapter I argue that the 'production' of cheap food was premised on a built environment dedicated to the acceleration of circulation time and capital in space, including food. In order to do so, I have divided this chapter into three sections. The first section demonstrates the importance of railways over other technologies of transportation in order to show the centrality of space-time relations in the development of capitalist-based food relations. In the second section I discuss the impact of competition on the geography of production in relation to the development of preferential rates and traffic-maximising policies. Finally, I investigate the development of the milk trade in particular, as a case study of how urban development and the requirements of

[5] Terence R. Gourvish, *Railways and the British Economy 1830-1914* (London, 1989[1980]), pp. 47-8; Robert James Irving, *The North Eastern Railway Company 1870-1914* (Leicester, 1976), p. 135.

mass consumption completely changed the space of production, but also as a clear case of how technology is not inherently 'progressive'. The social and technological history of the milk trade indeed conveys not only millions of gallons of milk as abstract exchange-value, but millions of gallons of contaminated, dirty, poisonous and heavily adulterated milk as concrete use-value with important consequences for people's health.

Competition and the Acceleration of Circulation Time

The rapid expansion of the railway from the 1840s onwards introduced important changes in the cost structure of transport. Sugar, which was carried by canal from Birmingham to London at 37*s.* 6*d.* per ton in 1842, cost 21*s.* 8*d.* per ton by rail in 1866. The conveyance of grain from South Staffordshire to Liverpool cost 13*s.* 4*d.* per ton by canal in 1831, compared to about 11*s.* 3*d.* per ton by rail in 1866.[6] As Terence R. Gourvish notes, the expansion of railways tended to cut 'transport costs, both by introducing lower rates themselves and by forcing competitors to cut their own charges, the extent of the reductions, and the effects on markets and commodities, almost defy generalisation.'[7] To be sure, both waterways and coastal shipping continued to play an active role in the conveyance of goods up to 1914, but, as I argue in this section, the superiority of rail-borne foodstuffs was such that by the mid-nineteenth century, the fate of both canals and coastal shipping had been settled, and their roles in the transport of food goods would only continue to decline. 'As regards the conveyance of goods', wrote

[6] 'Report of the Royal Commission of Railways', *PP* XXXVIII, Part I (1867), p. lxv; RSCR, Part 2, Appendix 59, p. 262.
[7] Gourvish, *Railways and the British Economy*, p. 29.

a Select Committee in 1844, 'railways are, in many cases, exposed to an effective competition from canals, and since the saving of time does not give such a decided superiority over the old modes of conveyance.'[8] Only two years later the Select Committee on Railway Acts Enactments took a more sober approach, as it concluded that canals had been 'beaten' by railways and the introduction of lower rates.[9]

Canals had until then largely remained shielded from the competition brought forward by railway companies, in part because railways tended to specialise in passenger and high-value traffic. A serious challenge to waterways from railways came from the conjunction of two important developments of the 1840s. The first one was the great mania of the 1840s during which colossal fortunes were poured into the construction of railways. Total capital raised by railways rose from £54.6 million in 1841 to £228.6 million in 1850 in £1,272.5 million in 1912.[10] One effect of this vast expansion was not only the growing comprehensiveness of the whole system, as distinct local and regional railway systems were linked to one another, but also the financial pressure to increase the goods traffic through a reduction in freight charges. 'The decision to pursue quantity was made at a time of falling profits. In the post-'mania' depression, the ordinary dividend of the leading companies fell by half to below 3 per cent in 1850.'[11] Carrying in bulk thus became one of the operative principles of railway companies.

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[8] 'Fifth report from the Select Committee on Railways', *PP* XI (1844), Appendix 2, p. 20.
[9] Cited in Samuel Salt, *Facts and Figures, principally relating to Railways and Commerce* (London, 1848), p. 107.
[10] G. R. Hawke and M. C. Reed, 'Railway Capital in the United Kingdom in the Nineteenth Century', *The Economic History Review*, New Series, Vol. 22, No. 2 (1969), pp. 270, 272.
[11] Gourvish, *Railways and the British Economy*, p. 28.

The second major development was the normalisation of through traffic. The establishment of the Railway Clearing House in 1842 helped to harmonise closed railway systems through the gradual elimination of goods transfer from one system to another.[12] Until then, transhipments at the junction between two lines frequently produced chaotic scenes and wastes of time. As capital investments increased, and therefore the need for profitability, the Clearing House played a vital role in the acceleration of the flow of commodities in space. The proportion of route mileage of railway companies parties to Clearing House rose from 50.8 percent to 94.5 percent between 1850 and 1870, before stabilising at about 91 per cent between 1880 and 1910.[13] Tellingly, the proportion of goods cleared per annum remained stable at about 36 per cent throughout the 1864-1913 period,[14] thus suggesting an important intra-district trade, including ports, within the same railway system. Together, these developments were important landmarks in the acceleration of the circulation time of capital, combining the incentive to move more and more commodities with the willingness to move them quickly and efficiently. The late 1840s thus marked the beginning of an increasingly integrated and comprehensive system of transport that aimed towards the reduction of bottlenecks and delays. And this, as we shall see later, was of paramount importance for an extended range of food commodities whose perishable nature was intrinsically dependent upon space-time relations.

By the late 1860s canals were no longer an 'effective competition'. By then, all the main railway trunks had been built and most companies were now competing over the

[12] Philip S. Bagwell, *The Railway Clearing House in the British Economy 1842-1922* (London, 1968).
[13] Bagwell, *The Railway Clearing House in the British Economy*, p. 295.
[14] Bagwell, *The Railway Clearing House in the British Economy*, pp. 304-5.

matter of facilities, providing sheds, sidings, loading banks and cranks, and so on, to attract new traffic.[15] 'In considering the improvement of goods traffic,' concluded the 1867 Royal Commission on railways, 'it is very difficult to institute any comparison with the past, because the introduction of the railway system has entirely altered all the conditions of that traffic, and has enabled industry and trade to spring up which, without railways, could have had no existence.'[16] There were 3,639 miles of canals and navigations in England and Wales, and 183 miles in Scotland, in 1905, compared to 16,223 miles of railways opened in England and Wales, and 3,815 miles in Scotland, in 1912.[17] To be sure, canals were not archaic modes of transportation. The tonnage conveyed through canals in Britain rose from about 14 million tons in 1848 to 38.7 million tons in 1905.[18] By comparison, 440 million tons of goods were conveyed by rail in Britain in 1912.[19] Although the importance of railways was undeniable, waterways remained a significant alternative.

From the perspective of food, however, canals were marginal. Only a fraction of its tonnage was dedicated to foodstuffs, with coal, iron ore and pig-iron constituting by far the larger part of the traffic. True, large quantities of cocoa beans and sugar used by Cadbury's factory in Bournville was transited by the nearby canals from the ports of

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[15] 'Report from the Joint Select Committee of the House of Lords and the House of Commons, on railway companies amalgamation', *PP* XIII, Part I (1872), p. xxvii; 'Departmental Committee on Railway rates (preferential treatment)'[hereafter DCRR)], *PP* LV (1906), Q. 3857 (Andrew).
[16] 'Report of the Royal Commission of Railways', p. lxv.
[17] 'Report of the Royal Commission on Canals and Waterways', Vol. 4, *PP* XXXIII (1907), p. 2; 'Railway returns. Returns of the capital, traffic, receipts, and working expenditure of the railway companies of the United Kingdom for the year 1912', *PP* LXXV (1913), p. xxi.
[18] Bagwell, *The Railway Clearing House in the British Economy*, p. 64; 'Fourth and Final Report of the Royal Commission on Canals and Waterways', Vol. 7, *PP* XII (1910), p. 49.
[19] 'Railway returns for the year 1912', pp. 58, 60.

Liverpool and Bristol.[20] In the same way, Gloucester's corn market at the end of the 1880 was said to depend largely from the canal for its supply.[21] The point is not to deny the continuous existence of such arrangements, but to highlight their minuscule importance. By 1905, for instance, only 5,812 tons (or 0.003 per cent of the total tonnage) of agricultural products were carried on the Grand Junction Canal.[22] By far the great majority of goods carried on waterways consisted of minerals (i.e. coal, iron ore, pig-iron), building materials (i.e. stone, bricks, tiles, slates, timber, cement), town manure, refuse, and the like. With the shift away from arable land, following the mass imports of cheap grains, and towards pasture, waterways were simply too slow for the transport of livestock, milk, butter, fruits and vegetables. On the other hand, the importance of the grain trade in the ports of Britain made the railway more attractive.

The most powerful alternative to railways came from the coastal trade. Sea competition, as the general managers of the different railway companies repeatedly pointed out, was the main reason for the maintenance of low railway rates.[23] Indeed, freight rates in coastal shipping was almost systematically lower than railways.[24] As Gibb, General Manager of the N.E.R., put it in 1905:

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[20] John Bradley, *Cadbury's Purple Reign: The Story Behind Chocolate's Best-Loved Brand* (West Sussex, 2008), p. 51.
[21] RCMRT, Vol. 3, Q. 13,344 (Ward).
[22] 'Royal Commission on Canals and Waterways', Vol. 7, p. 62. See also: Dodd, *The Food of London*, pp. 169ff.
[23] RSCR (Rates and Fares), QQ. 225 (Birt), 502-3 (Walker), 1934 (Noble), 2415 (Forbes); DCRR, QQ. 3488-90 (Millar), 4322 (Forbes).
[24] Derek H. Aldcroft, 'The Eclipse of British Coastal Shipping, 1913-21', *Journal of Transport History*, Vol. 6, No. 1 (1963), pp. 24-38; Derek H. Aldcroft, 'The Depression in British Shipping, 1901-1911', *Journal of Transport History*, Vol. 7, No. 1 (1965), pp. 14-23; John Armstrong, 'The role of coastal shipping in UK transport: An estimate of comparative traffic movements in 1910', *Journal of Transport History*, Series 3, Vol. 8, No. 2 (1987), pp. 164-78; John Armstrong, 'Freight pricing policy in coastal liner

there are locally collected goods dealt with by the coastwise steamers plying to various parts. For example, take Stockton to London; the boat plying from the Tees to London carries local goods collected from a certain area round the Tees, brought for shipment to the Tees, and carried by the coasting boat to London. The same thing goes on at Goole. The fact is that ports, in addition to being available for the entrance of foreign merchandise, are also used for the distribution throughout England of local merchandise.[25]

Part of its success came from its cost structure. Apart from the ship itself, which could cost up to £20,000 for a coastal liner in the 1870s, coasters' expenses, once at sea, were generally limited, and were comprised of the crew's wages, fuel for steamers, food, port dues, and the normal wear and tear of the ship. Railways, on the other hand, had to sink millions into the buying of land, railway construction, goods vans, locomotives, stations, tunnels, signal boxes, wages and the like before even carrying the first load.[26]

In spite of its importance, however, sea competition, with the notable exception of grain, was largely absent from the conveyance of food in Britain between 1870 and 1914. This is not to say that it was non-existent, but that its proportion was comparatively small. If, as John Armstrong suggests, the total number of registered tons entering UK

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companies before the First World War', *Journal of Transport History*, Series 3, Vol. 10, No. 2 (1989), pp. 180-97.

[25] DCRR, Q. 4891 (Gibb).

[26] John Armstrong, 'Climax and Climacteric: The British Coastal Trade, 1870-1930', in *Exploiting the Sea: Aspects of Britain's Maritime Economy since 1870*, ed. David J. Starkey and Alan G. Jamieson (Exeter, 1998), pp. 43-5.

ports carrying cargoes in the coastal trade rose from 18.4 million to 34.8 million between 1870 and 1913, and the quantity of coal being carried coastwise rose from about 10.9 million tons to 20.5 million tons during the same period, then it is hard to believe that food occupied anything but a marginal place in coastal trade. Given that we are concerned with Britain, we would have to exclude from Armstrong's figures the trade in live animals and butter and the like coming from Ireland.[27]

Table 13 Total number of live cattle brought to London, 1853

	Oxen	Sheep	Calves	Pigs	Total
By Railways					
- Eastern Counties	81,744	277,735	3,492	23,427	386,398
- London and North Western	70,435	248,445	5,113	24,287	348,280
- Great Northern	15,439	120,333	563	8,973	145,308
- Great Western	6,813	104,607	2,320	2,909	116,649
- London and South Western	4,885	100,960	1,781	516	108,142
- South Eastern	875	58,320	114	142	59,451
- London and Brighton and South Coast	863	13,690	117	54	14,724
Total by railways	181,054	924,090	13,500	60,308	1,178,952
By Sea					
- From North of England and Scotland	14,662	11,141	421	3,672	29,896
- From Ireland	2,311	3,472	21	5,476	11,280
- From the Continent	55,065	229,918	25,720	10,131	320,834
Total by sea	72,038	244,531	26,162	19,279	362,010
Driven in by road	69,096	462,172	62,114	48,265	641,647
Total	322,188	1,630,793	101,776	127,852	2,182,609

Source: 'The London Commissariat', *Quarterly Review* (1854), p. 284.

Although coastal shipping was systematically cheaper than railways, it was slower. For many commodities this was impracticable. Time was obviously crucial for perishable commodities like fruit and vegetables, milk and meat. This is why Francis

[27] Armstrong, 'Climax and Climacteric', pp. 38-9.

Craze, market gardener from Penzance, always sent his produce by rail. Though cheaper, the steamer from Penzance to London only ran once a week and arrived one day later than the railway.[28] The same reason was given by John Taylor, an important grocer from Swansea, who received virtually all his goods by rail on account of its regularity and rapidity.[29] From the perspective of food, then, the importance of canals and coastal transport rested less in their overall contribution to the conveyance of food goods than in their ability to support, by their very presence, a competitive environment conducive to low freight rates.

The live cattle trade offered a particularly interesting case regarding the importance of turnover time for capital accumulation. Before steam transport opened up new markets, live animals reached distant markets on the hoof. On their journey to the southern markets, Scots herds from the districts of Aberdeen and Forfar were joined west of the Pennines by Irish cattle landing in Liverpool, and were driven to the grazing districts of Norfolk, Suffolk, and Lincoln to be fattened for the Midlands and London markets.[30] In his study of the cattle trade in Aberdeenshire, J. H. Smith argues that after its introduction in 1828, the transport of cattle by boat increased rapidly. It peaked in the 1840s, as which point between 9,543 and 15,858 head were shipped per year. With the expansion of the railway, the water-borne cattle trade fell to one-third of its previous size and never recovered. From 1850 to 1870, on average 39,000 live cattle were sent by rail

[28] RSCR (Rates and Fares)', QQ. 1834-43 (Craze).
[29] RSCR, Part 1, QQ. 3412-8 (Taylor).
[30] Dodd, *The Food of London*, pp. 107-10; J. H. Smith, 'The Cattle Trade of Aberdeenshire in the Nineteenth Century', *The Agricultural History Review*, Vol. 3, No. 2 (1955), pp. 114-8; Janet Blackman, 'The Cattle Trade and Agrarian Change on the Eve of the Railway Age', *The Agricultural History Review*, Vol. 23, No. 1 (1975), pp. 48-62.

to Edinburgh, Glasgow and London, the latter capturing up to 90 percent of the trade. By 1855, following the development of the dead meat trade, the butchers from Aberdeen were sending 8,000 tons of beef (28,000 carcases) by rail to London and 10,000 tons (35,000 carcases) in 1865.[31] By comparison, the amount of dead meat sent by sea peaked at 496 tons in 1857, before dropping at 61 tons in 1865.[32] As one commentator put it in 1854, 'Aberdeen is in fact becoming little else than a London abattoir.'[33]

The transport of live animals by rail had many advantages over sea-borne animals. First, it could operate under any weather. Storms at sea caused delays and, sometimes, losses. Still, many butchers complained about bruises and fractured ribs which decreased the value of their meat. Second, railways were faster, though more expensive. In 1865 it cost 21*s.* to send one beast to London from Aberdeen by boat compared to 25*s.* by rail.[34] Fifteen years later the costs were respectively 16*s.* and 25*s.* Yet, it took 36 hours to complete the journey to London by boat compared to 24 hours by rail. For the same route, charges per ton for the conveyance of meat were 47*s.* 6*d.* by steamboat and 67*s.* 6*d.* by rail.[35] While there can be no doubt that coastal shipping as an industry remained competitive throughout the period under review, one must also recognise that, because of its reliability and rapidity, the railway had already gained precedence over its rivals with regard to the conveyance of food.[36] As it happened, the annihilation of space by time was much more important to a developing capitalist system

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[31] Smith, 'The Cattle Trade of Aberdeenshire in the Nineteenth Century', pp. 114-5.
[32] Geoffrey Channon, 'The Aberdeenshire beef trade with London: a study in steamship and railway competition, 1850-69', *Journal of Transport History*, Vol. 2, No. 1 (1969), p. 23.
[33] 'The London Commissariat', *Quarterly Review* (1854), p. 287.
[34] Smith, 'The Cattle Trade of Aberdeenshire in the Nineteenth Century', p. 115.
[35] RSCR, Part 1, QQ. 6017-26 (Swan).
[36] Dodd, *The Food of London*, p. 271.

than a few shillings on the ton. As Dodd put it in 1856: 'without the railways and the steamers, the country-killed meat would fail to constitute an important part of the marketable commodities. 'Time is money,' to a most significant degree, in this particular.'[37]

Table 13 shows the early domination of the railway over the live cattle trade. Interestingly, the number of cattle driven into London by road – chiefly from Suffolk and Norfolk – was far more important than sea carriage. Yet, one of the most important elements of this revolution in the means of transportation was the fundamental alteration in the geography of production that it carried with it. The acceleration of movement in space brought by the steam revolution increased the turnover time of capital as previous lean-cattle jobbers (producers and drovers) increasingly became fatstock-rearing specialist producers. As Janet Blackman argued, the development of sea and rail borne live animals transportation allowed 'cutting out some of the intermediary stages in the marketing process', thus bringing the cattle breeder closer – both spatially and temporally – to the market. 'In this way', she concludes, 'the coming of steam transport by sea and rail helped to destroy the balance between stock-breeding and fattening areas which had developed at a time when cattle-droving was the only method of transporting livestock to the retail meat markets.'[38] By undermining the previous geographical advantage of certain districts over others, railways fundamentally reorganised the food supply according to the mass circulation of food in space.

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[37] Dodd, *The Food of London*, p. 266.
[38] Blackman, 'The Cattle Trade and Agrarian Change on the Eve of the Railway Age', pp. 60-1.

Fractured Space: Preferential Rates in an Era of Free Trade

In order to evaluate the role played by railways in the supply of food, it is essential to understand their relationship with the repeal of the Corn Laws in 1846. At the heart of the latter lies a certain conception of the 'public interest', which, in the context of the 1840s, was nothing more than a euphemism for the country's growing incapacity to secure its subsistence. But the legal apparatus of free trade did not – and simply could not – stop with free trade policies and low tariffs on imported goods, and the legal framework within which railways evolved needed to reflect that. Section 2 of the Railway and Canal Traffic Act of 1854 explicitly stated that:

> no such company shall make or give any undue or unreasonable preference or advantage to or in favour of any particular person or company, or any particular description of traffic, in any respect whatsoever, nor shall any such company subject any particular person or company, or any particular description of traffic, to any undue or unreasonable prejudice or disadvantage in any respect whatsoever.

As Henry Tennant, General Manager of the North Eastern Railway, perceptively put it: 'The governing words are "undue or unreasonable;" you may read that section as indicating that a railway company may give a preference or an advantage; the only reservation is that it shall not be undue or unreasonable.'[39] Undue preference, unfair advantage or unjust privilege were indeed perennial complaints brought before the

[39] RSCR, Part 1, Q. 14,817 (Tennant).

different railway commissions by farmers and traders alike during the second half of the nineteenth century.

Speaking generally, these complaints can be regrouped under two complementary headings with their own competitive geography. The first relates to the principle of 'equal mileage rates', which stated that freight rates varied uniformly according to distance. Generally used in the early days of railway, the principle became impracticable in the context of an emerging national railway system. Furthermore, because companies assumed that most costs were fixed costs, they 'were willing to widen the market as far as possible by giving special rates to suppliers who would otherwise have been unable to compete in distant markets.'[40] For example, the conveyance of potatoes from Perth to London (444 miles) was quoted at 27*s.* 6*d.* per ton compared to 21*s.* 8*d.* per ton from Perth to Leeds (260 miles), thus giving a ratio of 0.75*d.* and 1.00*d.* per mile, respectively.[41] Similarly, William B. Forwood, mayor of Liverpool, complained that the rate of 25*s.* per ton for the conveyance of sugar from Greenock to Birmingham (300 miles) was unfair compared to the rate of 17*s.* 6*d.* per ton from Liverpool to Birmingham (96 miles). Despite that it still cost 7*s.* 6*d.* less to forward sugar from Liverpool, in Forwood's mind the injustice came from the fact that the town did not get the full benefit of its geographical position.[42]

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[40] P. J. Cain, 'Traders versus Railways: The Genesis of the Railway and Canal Traffic Act of 1894', *Journal of Transport History*, New Series, Vol. 2, No. 2 (1973), p. 66.
[41] RSCR, Part 1, Q. 1766 (Craze).
[42] RSCR, Part 1, QQ. 1689, 1787-93 (Forwood). For a similar argument coming from the port of Hull in the specific context of the N.E.R. system, see: D. Brooke, 'The Struggle between Hull and the North Eastern Railway 1854-80', *Journal of Transport History*, New Series, Vol. 1, No. 4 (1972), pp. 220-37; Irving, pp 119-21.

Yet the fate of equal mileage rates had already been settled in 1867 when a Royal Commission on railways expressed the opinion that as a result of the inequality in rates, 'the general public have derived an unqualified advantage from the great increase of facilities for the conveyance of merchandise'.[43] This rationale was upheld a few years later by a joint select committee as 'impracticable' because it would prevent railway companies from lowering their rates and thereby 'deprive the public of the benefit of much of the competition which now exists'.[44] What is important here is the political recognition that the movement of goods in a capitalist society must ultimately overcome the conception of space as a 'container', and therefore transforms the space as a material absolute into a relative one.[45] From the perspective of railways, then, this allowed the legal ability to break free from the rigid space of their system by taking full advantage of the Clearing House, and the possibility to quote through rates. In so doing, railways created an entirely new geography of circulation founded upon inter-district competition.

Far more resilient was a second complaint, this time embedded within an international geography of production, and opposing home to foreign producers. It is certainly a measure of the social benefits associated with cheap food imports that by the turn of the century very few farmers would speak against the idea of free trade. 'I am opposed to protection,' says one of them, 'because I do not think it would be to the interests of the country as a whole.'[46] 'As a grower,' said another, 'it [protection] would

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[43] 'Report of the Royal Commission of Railways', pp. xlvii.
[44] 'Report from the Joint Select Committee of the House of Lords and the House of Commons, on railway companies amalgamation', Part I (1872), p. xxxii.
[45] Henri Lefebvre, *The Production of Space*, Trans. Donald Nicholson-Smith (Oxford, 2002[1974]).
[46] 'Report of the Departmental Committee on Fruit Culture in Great Britain', *PP* XXIV (1905), Q. 6034 (Hodge).

be a great benefit to me, but I am not convinced that it would be a benefit to the country.'[47] What they could not accept, however, was the existence of two different rates for home and foreign producers (Table 14). For instance, foreign dead meat from Liverpool to London was conveyed at 25*s.* per ton, compared to 50*s.* per ton for home meat. And whilst home cheese could be sent from Derby to Newcastle (171 miles) at 47*s.* 6*d.* per ton, American cheese was conveyed from Liverpool to Newcastle (170 miles) at 20*s.* per ton.[48]

As John William Dennis put it in 1905: 'I, as a Lincolnshire farmer, am shut out of all the markets in the South of England with my potatoes... I can supply those markets, as a trader, infinitely cheaper from farms which shall be anywhere between 150 and 250 miles inland in France, the sea traffic being thrown in and the transhipment and every thing'.[49] Not surprisingly, railway companies tended to justify lower rates for foreign goods as the result of inter-district competition, especially given that the vast majority of imported goods were handled by a handful of ports.[50]

Part of the problem with the justification of a different structure of rates between home and foreign agricultural products on the basis of inter-district competition, was its relative abstractedness. Farmers had good reasons to question the argument's shaky foundations. After all, they argued, if railway companies can carry foreign traffic at a lower rate and still make a profit, there is no reason for them not to carry home traffic at the same rate. Of course, railway companies were well aware that in quoting rates they

[47] 'Report of the Departmental Committee on Fruit Culture in Great Britain', Q. 5863 (Sinclair).
[48] RSCR, Part 1, QQ. 6092 (Swan), 10,534-8 (Bell).
[49] DCRR, Q. 1602 (Dennis).
[50] RSCR, Part 1, Q. 14,825 (Tennant); RSCR (Rates and Fares)', Q. 664 (Walker), 1963 (Noble); RCMRT, Vol. 2, Q. 3088 (Birt).

had to take into consideration the quantity, value, and bulk of the goods conveyed.[51] Yet, the paucity of statistics in regards to the carriage of goods meant that they were simply unable to prove that imported foodstuffs were cheaper to handle than locally grown agricultural produce. In short, they were unable to assess the cost of moving individual items of traffic. The following exchange between one of the commissioners of the 1882 Select Committee on Railways and Sir Henry Birt, General Manager of the G.E.R., speaks for itself: 'how can you tell whether you are making the line pay or not, if you fix the rate without reference to the cost of the service?—It is understood every half year, when the accounts are made up. That question of ascertaining the cost in detail is an utterly impracticable thing.'[52] For most of the period under review, then, rates were no more than well-informed guesses made by agents having a general sense of 'what the market would bear'.

Table 14 Comparative rates on foreign and home live cattle and sheep, 1881

	Small wagon	Medium wagon	Large wagon
From Glasgow to London			
- home cattle	£8 15s. 4d.	£9 11s. 9d.	£11 5s. 0d.
- foreign cattle	£7 6s. 0d.	£8 2s. 0d.	£9 5s. 6d.
From Newcastle to Manchester			
- home cattle	£3 7s. 0d.	£3 13s. 6d.	—
- foreign cattle	£2 4s. 3d	£2 9s. 9d.	—
- home sheep	£2 14s. 0d.	£3 0s. 0d.	£3 5s. 9d.
- foreign sheep	£2 4s. 3d.	£2 9s. 9d.	£2 19s. 3d.

Source: RSCR, Part 1, QQ. 6047-57 (Swan); RSCR, Part 2, Appendix 5.

[51] RSCR (Rates and Fares)', Q. 438 (Birt).
[52] RSCR (Rates and Fares)', Q. 441 (Birt).

It might well be argued that the existence of different rates between home and foreign producers for the conveyance of goods was only another form, albeit positioned at a different geographical scale, of the earlier debate over equal mileage rates, except that this time it opposed national and international producers, rather than regionally based British farmers. Here too railway companies found in the state an unswerving supporter, even though they were incapable of proving that they were justified in quoting two different rates. As in the equal mileage rates debate, Parliament upheld the view that undue preferences were justifiable as long as they benefitted the public, which was axiomatic in the case of imported food. Section 27(2) of the Railway and Canal Traffic Act of 1888 read:

> In deciding whether a lower charge or difference in treatment does or does not amount to an undue preference, the court having jurisdiction in the matter, or the Commissioners, as the case may be, may, so far as they think reasonable, in addition to any other considerations affecting the case, take into consideration whether such lower charge or difference in treatment is necessary for the purpose of securing in the interests of the public the traffic in respect of which it is made.

In the context of the country's rapidly increasing dependence upon imported foodstuffs, the 1888 Act dispelled any ambiguity about railways' role in providing the public with cheap food, as well as the extent to which the legal framework regulating railway

activities would in fact uphold the spirit of the 1846 repeal, by encouraging the creation of a competitive environment.

Parliament's efforts to promote the 'public interest' was tested on January 1st, 1893, when many railway companies at once raised their rates. In an important piece of legislation, the Railway and Canal Traffic Act of 1894 stated that following any complaint for the increase of a rate after December 31st, 1892, it was the company's responsibility to prove that the increase was reasonable. The effect of the Act, which came to be known as the 'Trader's Charter', was to roll back many of the rates to their pre-1893 level, while severely restricting railways' capacity to raise their rates thereafter.[53] Obviously, this was to prove an important gain when food prices increased after 1896.

Limits on what companies could charge introduced a strong incentive towards more efficient work and helped spark a more critical approach to the question of the costs of operation. From this research emerged ton-mile statistics in the late-1890s and early 1900s, which settled the whole debate over different rates between foreign and home producers by tearing apart the belief that most costs were fixed costs. Examined before the Departmental Committee on Railway Rates in 1905, Sir George Gibb, General Manager of the N.E.R., reported that out of a total of 561,728 tons of grain forwarded by the company in 1904 over its whole system, 295,835 tons (53 per cent) were carried from ports – 269,222 tons or 91 per cent of which came from Hull (182,419 tons) and Newcastle (86,803 tons). The difference (265,893 tons) was carried from 467 different

[53] Cain, 'Traders versus Railways'.

stations other than ports, an average of 569 tons per station per year. The average load per train departing from various country stations and serving the inland farmers was about 32 tons, compared to 308 tons per train leaving the port of Hull and sent direct. As Gibb argues, 'just imagine the difference between carrying 269,222 tons from two points, and 265,895 tons from 467 separate points.' Gibb further noted that there were in England at that time 8,900 railway stations and only 70 ports, 94.3 percent of the total value of imports transiting by only 13 of them. 'These conditions produce a situation in which railway carriage to and from the ports is necessarily on a more advantageous basis, so far as cost is concerned, than can be the case in inland parts of the country.'[54]

The immediate effect was to legitimise low rates for large and bulky foreign consignments sent direct from docks, and to portray the numerous small consignments typical of home producers as both burdensome and inefficient. The General Manager of the G.N.R. dismissed the case of Mr Dennis who complained about high rates. In 1904 Dennis sent 6,657 tons through 1,993 wagons – an average of three tons six cwts. three quarters per wagon – from 250 different stations. As the G.M. put it, 'there is no advantage in that. If he [Dennis] is to come and talk about his very big loads, they must go to the same place.'[55] The same was true from the agricultural district covered by the G.E.R. Taking the 77 tons of English dead meat sent from Suffolk and Norfolk to London for a week as an example, Gardner showed that they consisted of 561 consignments sent from 133 different stations and loaded into 282 different trucks. The weight of each consignment ranged from 17 lbs. to 23 cwts. 3 quarters, 483 of them being of 5 cwts. or

[54] DCRR, QQ. 4888, 4912-5, 5016, 5022, 5045 (Gibb).
[55] DCRR, Q. 4011 (Bury).

under, and only three consignments of 20 cwts. or more.[56] This was hardly comparable with the 2,100 tons of foreign dead meat coming direct to London every week from Birkenhead through 14 trains.[57]

The shift in power relations between railway companies and home producers brought forward by ton-mile statistics was also visible in the more paternalistic approach taken by the former. As Alfred Malby, Goods Manager of the London and South Western Railway, said:

> It is my opinion that all complaints would at once cease if agriculturalists were equally anxious to adapt themselves to modern requirements, and would so pack, grade and concentrate their produce as to send it to the markets in such condition and such quantities as would enable it to compete with the properly graded and packed foreign produce with which it now cannot compete.[58]

Already by the mid-1890s companies' new attitude towards cost of operations was shown in their promotion of agricultural co-operation amongst home producers, notoriously through publicity campaigns and the introduction of lower rates for the conveyance of

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[56] DCRR, QQ. 4753-4 (Gardner).
[57] This is based on Hennell's (DCRR, QQ. 4613-7) estimates that two train loads of 30 trucks each left Birkenhead every day to London. Putting the average weight per truck at 5 tons, we obtain 2,100 tons per week or 109,200 tons per year.
[58] DCRR, Q. 5579 (Malby). See Edwin A. Pratt, *The Transition in Agriculture* (London, 1906), pp. 195-228.

larger quantities.[59] As William Andrew, Chief Goods Manager of the North British Railway, put it:

> The small consignments are a very serious matter for the railway companies; and I am quite sure that the railway companies would welcome most heartily anything in the way of giving them better loads and so reducing the handling of the traffic and the transhipment which takes place at present.[60]

Agricultural co-operation remained marginal until the end of our period. By then, however, what was most significant was not so much how long it took railway companies to develop an economic argument capable to support 'undue preference', as Parliament's continuous support for it in spite of any such proof.

The main effect of the combination of these two geographies of railway freight rates—uneven mileage rates and the preference given to foreign importers—in relation to the ongoing importance of coastal shipping, was the production of an extended inter-district competition supporting and encouraging low freight rates over the circulation of food. As Sam Fay, General Manager of the Great Central Railway, explains in 1908:

> You see you have got prowling around this country the most active mercantile marine in the world. A tramp can turn up and take a shop-load. He can take it from Glasgow to Southampton and project it inland; he can take it to Bristol and send it

[59] DCRR, Q. 4477 (Hennell); Q. 5062 (Gibb).
[60] DCRR, Q. 3860 (Andrew). See QQ. 4237-9 (Bury).

> to Marlborough or somewhere else. It is competition not only to a port, but inland from that port. It always has been so. There has been a great volume of evidence given upon this subject before Commissions, and it is worse perhaps to-day than before, and we are constantly having to reduce our rates.[61]

This was even more so, given the constitution of the railway system into distinct, consolidated geographical monopolies which competed for goods traffic beyond the limits of their own system, especially that which came from the ports.[62]

The 'Iron-Tailed Cow'

Before the 1860s, the supply of milk to the metropolis was largely drawn from a circuit of six to eight miles, urban and suburban producers supplying the bulk of the milk. Although rail-borne milk would not significantly alter the system of intra-urban milk supply until the 1870s, contemporaries were not mistaken in recognising that the older system of providing for the town's needs was being redefined by the 'iron-tailed cow'.[63] As early as 1846, up to 150 cans or churns of milk were carried to Manchester every day, and, as Table 15 shows, no less than 900,000 gallons of liquid milk were brought into London in 1853, most of it by the Eastern Counties railway.[64] By the end of the 1840s, George Beesley could write that the 'abundant supply of milk' now obtained as a result

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[61] 'Departmental Committee on Railway Accounts and Statistical Returns', *PP* LVI (1910), Q. 7831 (Fay).
[62] 'Report from the Joint Select Committee on railway companies amalgamation', p. xxvii.
[63] Salt, *Facts and Figures*, p. 37, Lardner, *Railway Economy*, p. 11; Matthew Marmaduke Milburn, *The Cow: Dairy Husbandry and Cattle Breeding* (New York, 1852[1851], pp. 60-3; Dodd, *The Food of London*, p. 297.
[64] Salt, *Facts and Figures*, p. 27.

of the opening of the railways has 'reduced very considerably the number of cows kept in the town [Liverpool] for milking purposes'.[65] Beesley further wrote:

> Large quantities of milk are forwarded daily, by the railways, to Liverpool, Manchester, and Bolton,—in some instances a distance of 40 miles, but ordinarily from 15 to 20. It is sold to the wholesale dealers, at from 6d. to 8d. per gallon, they paying the carriage, and is retailed at 8d. to 10d., which is from 4d. to 6d. per gallon less than the price of milk conveyed in spring carts or produced in the towns.[66]

Thanks to the numerous small milk farms populating the hills and valleys of the mountainous districts situated around the large towns and manufacturing villages and the increasing network of railway lines and stations, Lancashire very early developed a close relationship for the supply of milk by rail with its surrounding areas.

The outbreak of cattle plague in 1865 and the decimation of upwards of one half of a large town's milk cows, acted as a catalyst for the supply of milk by rail,[67] an extraordinary pull in a place such as London where probably over 20,000 cows were kept in and round the City in the 1850s.[68] The outbreak also shed light on the lack of space and cleanliness, and the cramped and filthy state of many cowsheds, and no doubt

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[65] George Beesley, *A Report of the State of Agriculture in Lancashire* (Preston, 1849), p. 17. See also: Milburn, *The Cow*, pp. 63-5.
[66] Beesley, *A Report of the State of Agriculture in Lancashire*, pp. 8-9.
[67] Peter J. Atkins, 'London's Intra-Urban Milk Supply, circa 1790-1914', *Transactions of the Institute of British Geographers*, New Series, Vol. 2, No. 3 (1977), pp. 383-99; David Taylor, 'London's Milk Supply, 1850-1900: A Reinterpretation', *Agricultural History*, Vol. 45, No. 1 (1971), pp. 33-8.
[68] Braithwaite Poole, *Statistics of British Commerce* (London, 1852), p. 227; Dodd, *The Food of London*, p. 294; Taylor, 'London's Milk Supply', p. 33; Atkins, 'The Growth of London's Railway Milk Trade', p. 208.

'sounded their death knell.'[69] There were, indeed, no shortage of reformed-minded witnesses examined before the commissions on the cattle plague during the 1860s and 1870s, who identified urban cowsheds as hotbeds of many diseases and asked for their complete eradication.[70] In the meantime, the wiping out of half of London's productive capacity provided the surrounding counties of Derbyshire, Staffordshire, Nottinghamshire, Wiltshire, Gloucestershire and Somerset with undreamed of new opportunities (Table 16). In his address to the General Meeting of the Royal and Agricultural Society of England on December 12, 1866, Harry Stephen Thompson noted the phenomenal growth in the supply of milk to large towns now conveyed by railway.[71] The London and North Western Railway, for instance, which carried 85,616 gallons into London in 1864, carried 490,320 gallons in 1865 and 1,209,284 gallons in 1866.[72] Similarly, the Great Western Railway increased its contribution from 23,000 gallons in August 1865 to 103,000 in October of the same year, and the London and North Western Railway increased its business from 6,000 gallons to 92,000 gallons during the same period.[73] The London, Brighton, and South Coast Railway, which was conveying 54,004

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[69] Taylor, 'London's Milk Supply', p. 37.
[70] 'First report of the commissioners appointed to inquire into the origin and nature of the cattle plague'; 'Second report of the commissioners appointed to inquire into the origin and nature of the cattle plague'; 'Third report of the commissioners appointed to inquire into the origin and nature of the cattle plague', *PP* XXII.321 (1866); 'Report from the Select Committee on Contagious Diseases (Animals)', *PP* XI.189 (1873); 'Report from the Select Committee on Cattle Plague and Importation of Live Stock; together with the proceedings of the committee,, minutes of evidence, and appendix', *PP* IX.1 (1877).
[71] Harry Stephen Thompson, 'Address of the President to the General Meeting, held December 12, 1866', *Journal of the Royal Agricultural Society of England*, Second Series, Vol. 3 (1867), pp. 434-5.
[72] Fussell cited in Taylor, 'London's Milk Supply', p. 36.
[73] F. A. Barnes, 'The Evolution of the Salient Patters of Milk Production and Distribution in England and Wales', *Transactions of the Institute of British Geographers*, No. 25 (1958), p. 180.

gallons of milk in 1864, was conveying into the metropolis 409,912 gallons two years later.[74]

Table 15 Quantity of railway milk imported into London (millions of gallons)

Date	Qty.	Date	Qty.	Date	Qty.	Date	Qty.	Date	Qty.
1853	0.9	1871	10.0	1883	28.4	1895	47.0	1907	69.4
		1872	11.0	1884	29.6	1896	49.2	1908	73.3
1861	1.4	1873	12.1	1885	30.7	1897	49.8	1909	76.1
1862	1.7	1874	12.9	1886	32.4	1898	50.4	1910	78.7
1863	1.9	1875	14.0	1887	34.4	1899	52.4	1911	81.3
1864	2.2	1876	15.2	1888	36.4	1900	53.5	1912	84.2
1865	3.4	1877	17.3	1889	38.6	1901	53.7	1913	88.1
1866	7.0	1878	19.6	1890	40.5	1902	54.5	1914	93.2
1867	6.1	1879	21.5	1891	42.1	1903	54.7		
1868	7.5	1880	23.8	1892	43.4	1904	58.3		
1869	8.7	1881	26.0	1893	44.7	1905	62.3		
1870	9.3	1882	27.3	1894	42.4	1906	65.7		

Source: Peter J. Atkins, 'The Growth of London's Railway Milk Trade, c.1845-1914', *Journal of Transport History*, New Series, Vol. 4, No. 4 (1978), p. 209.

Despite the growing importance of the conveyance of milk by rail, town dairies would remain a reality – albeit in decline – in numerous large towns up to 1914. For instance, there were 1,120 cows and 1,600 cows in the borough of Newcastle and Edinburgh, respectively, in 1877.[75] By 1900 most of the producers for Newcastle were situated within 20 miles of the town, in the Tyne Valley, thus suggesting that milk coming by road was probably not uncommon.[76] In Edinburgh, very little milk was coming 'by rail from any far distance', one-third of the supply coming from farms – most of them with herds of 40 to 50 cows – situated from four to ten miles from the City of

[74] 'Food Committee', *Journal of the Society of Arts* (1868), p. 293.
[75] 'Report from the Select Committee on Cattle Plague and Importation of Live Stock', p. 603, QQ. 549 (Brown), 1695 (Swan), 8862 (Melvin).
[76] 'Report from the Departmental Committee on Milk and Cream Regulations' [hereafter RDCMCR], *PP* XXX (1901), QQ. 1082 (Carrick), 2264 (Marshall).

Edinburgh. Drinkwater did not know of any dairy man having a cooler, these farmers coming by cart to the town to sell their milk warm.[77] Still, in 1900, Hugh Kennedy, president of the Glasgow Dairymen's Association, maintained that:

> A great deal of our milk is driven in by carts. We are quite adjacent and convenient to the dairy districts. Some of our farmers drive 10 to 12 miles—all the way. In the country men get up early and drive in their milk, and we have it also coming in at the various stations; I have it coming from as far as Galloway and down that way, and all parts of Ayrshire.[78]

There were no dairies in Manchester, which was principally supplied by rail from Cheshire, and Liverpool was supplied by both the 600 cow-keepers in the town, producing up to 20,000 gallons a day, and the dairy men who had milk consigned to them from the country by rail from a 25-150 miles radius.[79] Similarly, one could find 51 cowsheds in Blackpool in 1906, and there were still 2,697 cows in London in 1914 (down from about 8,800 in 1890) providing the metropolis with about three percent of its needs.[80]

The supply of milk in villages and small towns, especially in agricultural districts, probably relied more extensively on the proximity of dairy farmers. In Bolton, Newbury,

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[77] RDCMCR, QQ. 9129-33, 9141 (Drinkwater). See also: RDCMCR, Q. 5384 (King).
[78] RDCMCR, Q. 2075 (Kennedy).
[79] 'Report from the Select Committee on Cattle Plague and Importation of Live Stock', QQ. 3937, 3992 (Lambert); RDCMCR, Q. 2662 (Carruthers).
[80] Winstanley, *The shopkeeper's world*, p. 41; Atkins, 'London's Intra-Urban Milk Supply', p. 387; Atkins, 'The Growth of London's Railway Milk Trade', p. 210; Rew, p. 262.

Carlisle and Oxford, for example, no tolls, charges or restrictions were made upon farmers coming into town to sell their milk from door to door.[81] Also, the warm milk, when available, was preferred, as customers were generally suspicious of rail-borne milk, which was seen as a poor man's beverage, and therefore they were ready to pay more for warm, urban-produced milk.[82] Although such a preference faded rapidly in the 1870s following the rapid expansion of railway milk, there were still places like Bristol *c.*1900 where customers were ready to pay more for warm milk.[83]

Table 16 Quantity of milk brought into London by different railways (gallons)

	1853	1864	1887	1890	1899
Great Northern	*c.*36,000	209,396	—	4,370,624	
Midland	36,000	—	6,436,920	*c.*7,000,000 (out of *c.*11,080,000)	—
Great Eastern	793,545	1,020,492	—	4,547,036 (out of 4,713,111)	*c.*7,000,000
Great Western	5,850	*c.*500,000	8,500,000	9,778,815 (out of 12,985,748)	23,495,925
South Eastern	—	186,092	—	1,268,800	—
London, Chatham, and Dover	—	—	—	23,108	—
London and South Western	—	400,000	5,640,193	5,743,436	8,689,890 (min.)
London and North Western	—	85,616	—	*c.*7,000,000	—
London, Brighton, and South Coast	100 (tons)	54,004	—	—	*c.*700,000
Total	—	—	—	—	40,431,819

Source: R. Henry Rew, 'An Inquiry into the Statistics of the Production and Consumption of Milk and Milk Products in Great Britain', *Journal of the Royal Statistical Society*, Vol. 55, No. 2 (1892), p. 263. The figures for 1853 are taken from: 'The London Commissariat', *Quarterly Review* (1854), p. 293. For that year, the quantities carried by the Midland and the Great Eastern are from the North Western Railway and the Eastern Counties Railway systems, respectively, as before amalgamation. For 1899, see: 'Report of the Departmental Committee on Food Preservatives', *PP* XXXIV.579 (1902), Appendix 9, p. 373-6.

[81] RCMRT, Vol. 4, QQ. 1302-3 (Slack), 1374 (Bickerton), 1769 (Smith).
[82] 'Second report of the commissioners appointed to inquire into the origin and nature of the cattle plague', Q. 4356 (Talbot); Atkins, 'The Growth of London's Railway Milk Trade', p. 222.
[83] RDCMCR, QQ. 5228-9 (Pearce).

In spite of the resilience of town dairies and other informal arrangements, however, their fate had already been sealed. Many tried to reconstitute their herds after 1865, without much success.[84] In fact, the outbreak, that shed light on the squalor of many cowsheds, had highlighted their declining profitability. By 1850 urban and suburban milk producers were already feeling the effects of urbanisation on land tenure and open spaces, with the slow disappearance of meadows in and around large towns, which pushed up rents. As urban land use increasingly encroached on urban pastures, intra-urban milk producers were either pushed to the fringe of a constantly expanding urban universe, or forced into small cowsheds in order to cut costs. Meanwhile, they became more and more dependent on the country to import bulky fodder, root crops, and meadow hay. Added costs associated with the import of food were those of taking away the manure, although a great deal ended up in the sewers or was taken out by local farmers.[85] Moreover, after the outbreak of 1865, intra-urban producers faced an increasingly demanding regulatory framework of inspection and licensing, while making it more difficult to build cowsheds on sites not previously used for that purpose.[86] At the same time, the introduction of new regulations made it more difficult for economically burdened small urban producers to 'cheat their way out' of competition.

Given high mortality rate, profitability increasingly began to rely on productivity: 'my object', declared a dairy farmer nearby London, 'is quantity; I do not care about the

[84] Atkins, 'London's Intra-Urban Milk Supply', pp. 386-8.
[85] Barnes, 'Milk Production and Distribution in England and Wales', p. 193; Atkins, 'London's Intra-Urban Milk Supply', pp. 384-5; 'Report from the Select Committee on Cattle Plague and Importation of Live Stock', QQ. 5441 (Gebhardt), 9701 (Read).
[86] RDCMCR, QQ. 9146-9 (Drinkwater).

quality.'[87] Thus, intensive lactation through the heavy, artificial feeding of cows with brewers' grains, hay, mangel-wurzel, barley and pea meal became the basis of a whole system whereby cows were sent to the butcher as soon as the quantity of milk got down to about five to seven quarts a day.[88] Because the profitability of the system in part relied upon the slaughtering of fat cows, it gradually lost its purpose with the increase in cheap, imported live cattle and, later, chilled and frozen meat.[89] Of course, there remained cow-keepers in London who made the personal sacrifice of hard work and long hours for meagre rewards, but they were just more and more reliant upon a family's labour and rural immigrants, and many of those who gave up their licenses became specialist retailers.[90] It would therefore be wrong to conclude that the railway, by its sole presence, called for the end of town dairies. A whole series of social, political-economic, cultural and epidemiological concerns combined in complex and often contradictory ways to render urban cowsheds socially undesirable and economically unprofitable. The proportion of London's intra-urban milk supply dropped from 72 per cent in 1861 to about 3 per cent in 1910.[91] By that time, both town dairies and road milk, though still existing, were marginal.

One interesting aspect of the steady expansion of the railway milk trade was its spatial restructuring of production, as the supply of railway milk tended to come from

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[87] 'Second report of the commissioners appointed to inquire into the origin and nature of the cattle plague', Q. 4359 (Talbot).
[88] 'Second report of the commissioners appointed to inquire into the origin and nature of the cattle plague', QQ. 4423-31 (Panter).
[89] Barnes, 'Milk Production and Distribution in England and Wales', 193; Atkins, 'London's Intra-Urban Milk Supply', p. 392.
[90] Atkins, 'London's Intra-Urban Milk Supply', pp. 392-3.
[91] Barnes, 'Milk Production and Distribution in England and Wales', p. 180; Atkins, 'The Growth of London's Railway Milk Trade', p. 210.

areas closely following 'the pattern of the railway lines along which the milk travelled daily.'[92] Given the perishable nature of milk, and the lack of proper development in refrigeration technologies, the producer's proximity to the railway system remained key to profitability. Of course, cooling systems were used. Firms such as the Aylesbury Dairy Company, which received between four and five thousands gallons of milk a day at the end of the 1870s, and the wholesale milk contractors Freeth and Pocock, which depended on some 300 farmers in 1900, obliged their suppliers by contract to cool the milk down in order to slow down the souring process.[93] But these capital-intensive firms, however important, remained the exception in a trade characterised by small businesses. As Dr Archibald Kerr Chalmers, Medical Officer of Health at Glasgow, put it: 'very much depends on the extent of the business. The smaller farmers have no method of cooling.'[94] Also examined before the Departmental Committee on Milk and Cream Regulations, Thomas William Drinkwater, lecturer on chemistry in the Edinburgh School of Medicine and analyst for the Edinburgh and District Dairy Association, argued that he did 'not know of any dairyman who has a cooler.'[95]

The cooling of the milk was generally done by standing the full churns in water or by pouring the milk over metal tubes through which water circulated.[96] From the late 1870s onwards, wholesalers seeking to reduce wastage from the souring of milk in

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[92] E. H. Whetham, 'The London Milk Trade, 1860-1900', *The Economic History Review*, New Series, Vol. 17, No. 2 (1964), p. 380.
[93] 'Report from the Select Committee on Cattle Plague and Importation of Live Stock', QQ. 4841-5 (Wilson); RDCMCR, Q. 1256 (Pocock). See also: 'Food Committee', *Journal of the Society of Arts*, Vol. 16 (1868), p. 438.
[94] RDCMCR, Q. 3414 (Chalmers), Q. 6017 (Lloyd).
[95] RDCMCR, Q. 9134 (Drinkwater).
[96] Whetham, 'The London Milk Trade', p. 374.

transit, set up depots at country stations. These depots not only often offered cooling facilities, but also enabled the bulking of churns into van loads, thus helping to lower the circulation time of milk in transit.[97] At a time during which imports of factory-made North American cheese and European butter lowered the price of both, many British farmers turned towards the more profitable production of liquid milk where international competition was non-existent.[98] Railway companies were often anxious to offer facilities and special freight rates in order to develop and capture the growing market in railway milk. For the year ending 30th June 1881, the G.E.R. conveyed 2,171,988 gallons of milk for £7,956.[99] The trend was definitely upward, as more and more companies offered facilities for the collection of milk. For instance, both the Caledonian Railway and the North British Railway carried the milk traffic by passenger train, returning empty cans for free. The latter carried 758,000 gallons in 1881, an increase of about 19 percent on the volume carried over the previous year.[100] By 1905, the N.E.R. was building warehouses in Northallerton, North Yorkshire, 'for the purpose of enabling the farmers from one whole district to concentrate their milk, to get it Pasteurized in that building, and then to send it to the consuming centres.'[101] The cheapness of railway freight was perhaps nowhere better illustrated than in the complaint from Alfred Malby, goods manager of the London and South Western Railway, said 'that a large portion of this traffic is carried at rates which do not cover fully the cost of working.'[102]

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[97] Whetham, 'The London Milk Trade', pp. 374-5, 379.
[98] Whetham, 'The London Milk Trade', pp. 373-4.
[99] RSCR (Rates and Fares)', Q. 282 (Birt).
[100] RSCR (Rates and Fares)', QQ. 561-6 (Walker).
[101] DCRR, Q. 5067 (Gibb).
[102] DCRR, Q. 5579, 5602 (Malby).

Table 17 Freight rates charged for milk, selected railways (in d. per gallon)

Distance (miles)	Caledonian Railway	North British Railway	Great Eastern Railway	Great Western Railway	
	1882	1882	1882	1883-92	Mar. 1896-Jun. 1913
0-20	0.75	0.75	0.50 (min. 6*d.*)	1.17	0.50
21-40	1.00	1.00	0.75 (min. 9*d.*)	1.17	0.75
41-70	1.00	1.00	1.00 (min. 1*s.*)	1.17	1.00
71-100	1.00	1.00	1.00 (min. 1s)	1.42	1.00
101-150	1.00	1.00	1.25 (min. 1*s.* 3*d.*)	1.67	1.25
151-200	1.00	1.00	1.50 (min. 1*s.* 6*d.*)	1.92	1.50
Above 200	1.00	1.00	1.50 (min. 1*s.* 6*d.*)	2.17	1.50

Source: RSCR (Rates and Fares), Q. 564 (Walker), Appendix 1, Table E.E., p. 337; DCRR, Q. 4496 (Hennell), Atkins, 'The Growth of London's Railway Milk Trade', p. 214. (The rate of one penny per gallon for both the CR and the NBR is for distance exceeding 25 miles.)

It is important to note that railway rates for the conveyance of milk did not substantially change over the whole period. Braithwaite Poole's contention that railway companies usually charge 0.75*d.* per gallon for the conveyance of milk up to 40 miles in 1852 compares rather well with more contemporary figures (Table 17).[103] Contrary to many other trades, milk suffered no international competition. In fact, British farmers' proximities to railway lines and their virtual monopoly over the supply of milk, given the perishability of milk itself, fostered an environment within which railway companies enjoyed a comparatively low level of inter-district competition. The real success of railway milk does not lie as much in freight rates as in the complete overturn of the previous system of supply, and in the growing distance and comprehensiveness of the railway milk system, founded as it was upon capital's mediation of the increasing separation between producers and consumers.

[103] Poole (*Statistics of British Commerce*, p. 227) and Beesley (*A Report of the State of Agriculture in Lancashire*, pp. 8-9) suggest similar figures.

Delivering death

The milk supply was a constant problem throughout the period under review and levels of adulteration, after some progress during the early 1880s, showed no signs of improvement between 1888 and 1913 (Appendix C).[104] In fact, evidence suggests that the quality of milk during the second half of the nineteenth century declined substantially. As cities became increasingly dependent on the countryside, the railway offered several new opportunities for contamination. Easy to practice and hard to detect, the addition of water (often dirty and contaminated) to milk revealed a trade constantly struggling to keep up with expanding demand. Yet, as Henry Austin put it before the Metropolitan Sanitary Commission in 1847, the watering down of milk could also, paradoxically, represent a mixed blessing.

> The milkman ties up his cows in ill drained, ill ventilated stalls, and wonders perhaps that they become diseased, but retails his poisoned milk, nevertheless, somewhat more dearly for the loss. I once heard a milkman, under cross-examination in Court, when asked the question whether he did not sometimes add a "leetle" water to the milk he sold, boldly say, "Of course I do; the London stomach couldn't stand it pure." I have no doubt at all that he was right.[105]

[104] See also: Bear, 'The Food Supply of Manchester', Part 2, p. 513; F. Lawson Dodd, *Municipal Milk and Public Health*, Fabian Tract No. 122 (London, 1905).
[105] 'First Report of the Metropolitan Sanitary Commission', p. 131 (Austin).

Milk was a very problematic drink whose quality and nutritional value was rather doubtful. Before 1872, London milk contained on average 25 percent water added after one-third of the cream had been skimmed, and some even reported that hot water would be added to the milk and advertised as 'warm from the cow'.[106] By 1880, the Local Government Board estimated that Londoners spent about £75,000 a year on water when purchasing milk.[107]

Just as in the case of beer, the watering down of milk acted as the basis for yet further adulteration. 'Flour or starch were used to thicken its consistency, the juice of boiled carrots to give 'a fullness and sweetness', chalk for whiteness, and even brains to froth the milk.'[108] Colouring was widely used until the beginning of the 20th century, like the vegetable dye annatto and various aniline and sulphonated azo dyes. From 1890s onward, a new, subtler form of adulteration developed with the addition of skimmed or condensed milk to whole milk, a mixture referred to as separated or 'toned' milk. Dr Alfred Hill, Medical Officer of Health for Birmingham, said that there was 'a great deal' of adulteration in the milk trade in the city and that the practice of abstracting the cream from the milk or mixing the latter with separated milk was carried on a daily basis. Alfred Henry Allen gave similar evidence for Sheffield.[109] The major consequence of watering or 'toning' down the milk was to deprive it of its fat, so that milk supposed to contain

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[106] 'Food Committee', *Journal of the Society of Arts*, Vol. 16 (1868), p. 437.
[107] 'Ninth ARLGB', *PP* XXVI.1 (1880), p. cxiii.
[108] Atkins, 'Sophistication Detected', p. 320. See also: Andrew Ure, *A Dictionary of Arts, Manufactures, and Mines: Containing a Clear Exposition of their Principles and Practice* (Boston, 1853), p. 164.
[109] RDCMCR, QQ. 23-30 (Hill), 4506-7 (Allen). Allen was Fellow of the Institute of Chemistry, Fellow of the Chemical Society, Public Analyst for the City of Sheffield, the West Riding of Yorkshire and the boroughs of Barnsley, Chesterfield, Doncaster and Rotherham, and former president of the Society of Public Analysts in 1887 and 1888.

about 3.65 per cent fat never contained more that 2.17 per cent on average, and sometimes as little as 1.75 per cent. As milk that reached the town in the late afternoon – after an average of a 4-5 hour rail journey – was likely to turn sour before it could be distributed the next morning, the illusion of freshness came to rely on the liberal addition of chemicals like sodium carbonate, formaldehyde, formalin and boric acid at several points along the chain. By the time it reached the customer, especially in the hot summer weather, milk contained heavy doses of chemicals. Already problematic at this stage, the milk left over at the end of the day in small shops was preserved by the addition of boracic acid and formaldehyde and was clearly a 'great source of danger' to its potential consumer.[110]

Thanks to a Parliament more interested in maintaining its blind faith in *laissez-faire* principles than in enforcing a minimum of quality over people's food, milk remained a drink with its own dirty little secrets. The Dairies, Cowsheds and Milkshops Orders of 1875, amended in 1885, stipulated that local authorities were responsible for controlling the conditions of production of milk.

> In 1907 a quarter of Rural District Councils had not made regulations under an Order by then over 20 years old... In consequence there emerged in the last two decades of the nineteenth century a discrepancy between the dwindling number of relatively well regulated urban cowsheds and a rapidly expanding number of rural

[110] IDCPD, Vol. 2, QQ. 12,981-2 (Hawkes).

producers who were subjected to weak constraints, or to none at all. The frustrated authorities had no *right* to inspect or influence their country suppliers...[111]

In the absence of a central governmental authority, infected and adulterated milk was allowed to proliferate. Tuberculosis was a major cause of morbidity and mortality during the Victorian and Edwardian periods and milk was its most preferred vector of diffusion.[112] In this context, railways did not simply convey an otherwise 'neutral' liquid milk commodity, but became the principal support through which the mass transportation of infected and low quality milk became possible. Very few bothered to clean milk tankers at a time during which refrigerated wagons were rarely used and pasteurisation was little known or used until the end of the century.[113]

In Chapter 2 we saw how infant mortality was closely associated with the mother's health and the extent to which the general lack of satisfactory substitutes for breast milk tended to endanger the life of the infant. Evidence suggests a strong correlation between cows' milk, which was probably at its worse during the last three decades of the nineteenth century and early 1900s, and *rising* rates of infant mortality in England and Wales and Scotland *c.*1885-1905.[114] In 1899, the bacteriological examination of 50 samples of milk in St Pancras revealed that 32 percent were considered normal, 6 percent dirty, 16 percent contained excessive microbes, 12 percent were

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[111] Atkins, 'White Poison?', p. 211.
[112] Dickens Jr., *Dictionary of London*, p. 146.
[113] Atkins, 'Milk consumption and tuberculosis in Britain'; Peter J. Atkins, 'The pasteurization of milk in England: the science, culture and health implications of milk processing, 1900-1950', in *Food, Science, Policy and Regulation in the 20th Century*, ed. David F. Smith and Jim Phillips (London, 2000), pp. 37-51.
[114] Mitchell, *British Historical Statistics*, pp. 57-8. See also: George Frederick McCleary, *The Municipalization of the Milk Supply*, Fabian Tract No. 90 (London, 1899).

contaminated with leucocytes, 24 percent had traces of pus, and 10 percent contained tubercle bacilli. In Finsbury, 32 percent of milk sampled contained pus from diseased udders. Of 75 of the milk producers surveyed in Yorkshire, none ever washed their cows' udders, and putrescent milk arriving in large towns was not uncommon.[115] As late as 1909, the analyst for the borough of Chester reported that in some 'farms the cows are kept in a disgusting condition, and they can often be seen coming up to be milked plastered over with dung, and it is simply impossible for such cows to be milked without a good quantity of the dung getting into the milk.'[116]

Diseases like scarlet fever and tuberculosis also proliferated in the milk trade,[117] and Atkins has estimated 'that at least half a million (and possibly 800,000) human deaths in the period 1850-1950 are directly attributable to bovine TB [tuberculosis], especially among young children who were the main drinkers.'[118] While '[f]our-day-old milk with an overdose of chemicals was hardly the ideal infant food',[119] infected and dirty milk was likely to be the source of 'a variety of conditions lumped under the syndrome 'infantile diarrhoea', including enteritis, infective enteritis, gastro-enteritis, dysentery, 'English cholera', dyspepsia, gastric catarrh, and other diseases of the stomach and bowel.'[120] Diarrhoeal deaths, which constituted 10 to 13.25 per cent of infant mortality throughout the 1871-1895 period, reached alarming proportions from 1896 to 1914, accounting for 15 to 20 per cent of dead infants. Infant mortality peaked during the

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[115] Atkins, 'White Poison?', 212; IDCPD, Vol. 2, Q. 1,247 (Smyth).
[116] 'Thirty-Eighth ARLGB', *PP* XXIX.1 (1909), p. lxxxviii.
[117] Atkins, 'White Poison?'; 'Report on Eruptive Diseases of the Teats and Udders of Cows in Relation to Scarlet Fever in Man', *PP* XXXII (1888).
[118] Atkins, 'Milk consumption and tuberculosis in Britain', p. 87.
[119] Atkins, 'Sophistication Detected', p. 335. See also: IDCPD, Vol. 2, Q. 1267 (Smyth).
[120] Atkins, 'White Poison?', pp. 218-9.

summer, with the ARLGB reporting in 1912 that 82.6 per cent of deaths under two years of age from diarrhoea and enteritis in England and Wales occurred during the third quarter of the year.[121] Already struggling to maintain a semblance of quality throughout fall, winter, and spring, the quality of the milk trade, no doubt, was at its worst during the hot days of the summer.

Compiling the data available from the reports of Medical Officers of Health in 21 Local Authorities in the period 1894-1912, Atkins has revealed that out of 69,000 healthy infants, '74 per cent were breastfed, 12 per cent were fed breast milk and supplements, and 14 per cent were solely artificially fed. The diets of 3,600 dead infants showed the rather different proportions of 33 per cent, 18 per cent and 49 per cent respectively.'[122] Similarly, in Bury, of the 3609 children born during the years 1904, 1905 and 1906, 71 out of 2498 wholly breast-fed (2.84 percent) and 333 out of 1111 wholly brought up by hand (30 percent) died.[123] The decline in breastfeeding during the last decades of the nineteenth century was the result of both women's physical debilitation and new patterns of work outside the home.[124] Separated from their mother and the natural superiority of her milk, infants fed upon cows' milk. Dying from this milk, they too embodied just another version of the bourgeois idealised history of 'progress', demonstrating further how technologies of distribution such as the railway always conveyed more than commodities.

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[121] Forty-First ARLGB, p. viii.
[122] Atkins, 'White Poison?', p. 221. See also: Roberts, *A Woman's Place*, p. 166.
[123] Tuckwell and Smith, *The Worker's Handbook*, p. 17.
[124] IDCPD, Vol. 2, QQ. 1,236 (Smyth), 4,982 (Rowntree), 12,109 (Vincent). See also: Robert Millward and Frances Bell, 'Infant Mortality in Victorian Britain: The Mother as Medium', *The Economic History Review*, Vol. 54, No. 4 (2001), p. 727.

Conclusion

In this chapter I have argued that the 'production' of cheap food must ultimately rest upon infrastructures of transport conducive to the rapid transit of food in bulk. Essential to this was the growing capitalisation of the distance between producers and consumers, in order to realise economies of scale over the shipping of food goods. Very early on, the carrying capacity and the speed of the railway eclipsed its rivals in the food trade through the dramatic decline of the circulation time of food commodities over the whole distributive system. In so doing, railways opened a whole new range of possibilities by reshaping previous space-time relations and transforming the different time-scales of certain kinds of food, especially perishable products. Food commodities needed to move *en masse* and they needed to move quickly for the spatial limits of their perishable nature to be overcome. Moreover, the ability of the railway to accomplish this was enabled by the maintenance of an important competitive environment, especially amongst railway companies, and between the latter and coastal shipping. The constitution of a differentiated price structure favouring international producers over home producers tended to reinforce the importation of cheap food, and to stimulate further economies of scale through a better rationalisation of transport, and traffic policies geared towards the efficiency of movement in space. As the example of the milk trade demonstrates, the rising importance of railways during the second half of the nineteenth century completely changed the basis upon which the distributive system relied, while proving detrimental to people's health in important ways.

Conclusion

> The best of our land has long been occupied, and, though there is yet much of the inferior class that admits of improvement, it has become our interest as a nation to look also for further supplies from the broader and richer lands of other countries, which, to their advantage and ours, the beneficent principle of Free Trade has placed without our reach.[1]

In this dissertation, I have argued that the sphere of distribution is essential to an understanding of the political economy of food in Britain between 1850 and 1914. In this respect, I have demonstrated that cheap food 'production' was dependent upon the historical development of a highly competitive system of food distribution, based on both labour-intensive and capital-intensive methods of accumulation. Far from being something external to Britain, the ability of the system to produce cheap food required the emergence of a complex and multifarious system of food distribution within Britain, capable of transferring the benefits of cheaper food imports into real gains for the working-class. The acceleration of the movement of goods in space, the diminution of bottlenecks, the ability to transport food commodities in bulk over long distances while preserving their integrity, the articulation of a class of retailers capable of adapting to the new exigencies of urban development, in short, the emergence of a system of mass food distribution was key to the creation of a highly competitive distributive environment geared towards cheap food. Whatever the importance of cheaper food imports, the constitution of an international food regime during the second half of the nineteenth

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[1] James Caird, *The Landed Interest and the Supply of Food* (London, 1880), pp. 1-2.

century was neither detached nor disconnected from the profound social and structural changes affecting Britain at the time.

One of the main contributions of this dissertation relates to how we theorise and understand distribution. I have argued that distribution is better understood as both social and material, further maintaining that distribution is not reducible to the formal economy alone, and that a multifaceted approach to the concept is both historically and theoretically important and rewarding as it reveals analytically distinct, yet dialectically related, sites of distribution. The distributive space of the food market does not exist in abstraction of other vital sites of distribution such as the labour market, the community and the household. People interact with, and navigate through, these different spaces of distribution in complex ways in order to secure their daily and generational reproduction, and manage the contradictions emanating from each site's specific demands and logics. In this respect, this dissertation highlights the extent to which the food market shapes, and is shaped by, social and material relations of distribution other than those narrowly associated with the formal economy.

While the distribution of food in a capitalist society is naturally a class phenomenon, as demonstrated by the chronic state of under- and malnourishment of the working-class in the middle decades of the nineteenth century, food was never distributed equally amongst the different segments of the working-class, or amongst the different members of a family. Women and children often went short on food in order to preserve the physical integrity of the father, knowing that his ability to work made all the difference between controlled hunger and outright starvation. In this sense, the social

distribution of food was mediated through certain bodies consciously putting themselves at risk in order to attenuate capital's contradictions. In this respect, undernourished women, starved infants and hungry children, as well as the mass production of thin, rachitic, pale and anaemic bodies, are all examples of the extent to which food distribution is both social and material.

At the level of the food market, the material basis relates to the infrastructure that allows the distribution of food to take place. It is associated not only with the technologies of the movement of goods in space such as railways, carts or barrows for instance, but also with the specific location – fixed or not – of different distributors and retailers constituting the distributive system (e.g. shopkeepers, public markets, street sellers). Issues of time, space, place and scale matter enormously here because their different combinations across the whole distributive system respond to certain objective and subjective criteria. Thus, while the relationship between railways and wholesale markets corresponds to a specific space-time, itself subject to the time-scale of different foodstuffs, it is not fundamentally different than the relationship between the street seller and her neighbourhood, for example. Both are essential and complementary to the ways in which people obtained food, though obviously operating at different spatial and time scales.

Because of the different scales at which they operated, however, these different structures of distribution were both complementary and contradictory, as they responded to different social and political-economic needs. For instance, a small town's public market open for only two or three days per week was likely to shape the role of small-

scale retailers in its vicinity. At the same time, this particular market was within a larger regional and national system of food distribution, itself characterised by entirely different space-time relations, and responding to quite different economic imperatives and market incentives. The complex relationship uniting these different 'layers' of space-time relation within the distributive system was also powerfully stirred towards greater distributive integration, as the rise of large-scale retailers clearly demonstrates. In spite of their growing importance, however, their role was still marginal in 1914, thus illustrating the continuing relevance of spatially flexible and temporally adaptable small-scale retailers.

At the social level, the food market remained an institution deeply segmented by class, gender and age relations. Material practices of distribution and power relations must therefore be situated within their specific historical context. Indeed, I have demonstrated how small-scale retailers' reproduction within the urban landscape increasingly became entrenched in the subjection of the retail labour force in general, and the exploitation of children and women in particular. Increasingly then, to buy cheap food was to buy cheap labour, and securing one's physical integrity through a more varied and nutritious food basket all too often came at the price of someone's else growing inability to feed himself or herself. Beyond the fetishism of the commodity then, were highly exploitative social relations through which cheap food was made possible. At the same time, the capitalisation of retailing in the form of large-scale retailers capable of taking advantage of technologies of mass circulation tended to reinforce, rather than eliminate, labour-intensive methods of distribution by forcing their small-scale competitors into

economies of labour rather than economies of scale. The social and material aspects of food distribution thus combined in complex and unpredictable ways to create an environment mired by competition and conducive to low-prices on the one hand, and detrimental to the health and quality of life of an important segment of the working-class engaged in the retail trade on the other.

Another important contribution of this dissertation is the idea that the social distribution of food is not limited to the mere exchange of quantifiable commodities or exchange-value. As we saw, issues of quality, physical properties and adulteration were central to people's daily life and indeed had important consequences on their health. It follows that the distribution of food also entailed the uneven distribution of its differentiated quality. Heavily adulterated and unwholesome food was disproportionally obtained by the working-class, and the poorest segments, those who needed a nutritious diet the most, invariably obtained the worst food. Already exploited by a system that denied them the most basic access to the means of life, they were cheated again by obtaining systematically less than what they were paying for. One shilling's worth of food coming out of the working-class pocket was invariably worth less then the same shilling coming out of the middle class. And the same gendered and generational social relations we identified over the differentiated distribution of food quantity were invariably mobilised in the uneven distribution of qualitatively different and nutritionally uneven foodstuffs, with women and children, especially in poor neighbourhoods, more likely to receive the food with the lowest nutritional value.

When seen as a whole, however, the dialectical relationship between these two concepts of distribution helps to shed light on the larger dynamics of capital accumulation and the intricate bonds that inform the political economy of consumption. As I have tried to demonstrate, the rise in the standard of living, while obviously influenced in fundamental ways by cheaper food imports, was intimately linked to the subjection of the 'distributive interests' to the rule of capital. The repeal of the Corn Laws in 1846 must therefore be seen as the political assertion over the control of distribution, including food supply, by the capitalist class. The capitalisation of the 'distributive distance', separating mass consumption from mass production, was essential to the reproduction, not only of the original separation between the workers and their means of subsistence which forms the core of capitalist social property relations, but also and at the same time the reinforcement of this separation through the tightening of the working class's dependence on the market for survival.

It follows, according to this study, that the control over the sphere of distribution by the bourgeoisie is essential to capital's need to overcome the spatio-temporal limits to its own development, and must ultimately be taken into account in the narration of social changes and transformations in Britain between 1850 and 1914. Indeed, by taking the sphere of distribution seriously, this study demonstrates the extent to which rising real wages for the majority were ultimately rooted in the chronic poverty and physical and psychological precariousness of the retailing class. For while the small shopkeepers' social status was increasingly becoming an empty shell, relying more and more on the family's self-exploitation and cheap labour, including children and shop assistants, others

such as costermongers and shop assistants were often chronically hungry and malnourished. Long hours, hard work and very low wages awaited the large majority of those employed directly or indirectly in retailing, thus seriously toning down the liberal triumphal discourse of 'improvement' and 'progress'.

The constitution of a distributive system geared towards velocity, efficiency and comprehensiveness in the distribution of food goods must be understood as the natural extension to the creation of a landless proletariat, and the imperatives of mass production and mass consumption contained at the very core of this fundamental relationship. While the constitution of such a system of distribution was essential to the realisation of the potential created by cheaper food imports, it also contributed to reinforcing Britain's dependence on imported food by promoting the growth of such imports. Accordingly, if the rise in the standard of living at home for large segments of the working class was premised upon the subjection of small food retailers, it was also based on the spatial expansion of capitalist social relations abroad, and through which new countries and territories were opened for business.

Theoretical Outreach

The dissertation also engages with, and contributes to, several interrelated theoretical debates. The study of food provisioning is clearly relevant to the fundamental tenets of Social Reproduction Theory. On the one hand, exploring the dynamics associated with the food market offers important theoretical and historical insights on its importance as a site where social and material practices are constituted and negotiated. If

we accept, along with Isabella Bakker and Stephen Gill, that 'diverse activities, including labor in the marketplace and work in the home, each form a part of the general reproduction of social/material life',[2] then the food market offers a privileged site as a mediating interface between markets and households. More specifically, it allows us to explore the contradictions that emanate from the confrontation between households and communities, which are oriented towards fulfilling human need, and the limits imposed on them by the subjection of the whole process of social reproduction to capital accumulation through market dependence, including the labour market. The food market thus becomes a dynamic site where social-cultural and political-economic practices are materialised in the transformation of the money-wage into use-values.

The historical process by which the food market was transformed from a site where people gathered to exchange, socialise, interact and stroll, to a space oriented towards capital accumulation and regimented around principles of efficiency and maximisation, was crucial in the growing distinction between public and private spheres. But while the rise of the food market implies the gradual subjection of social reproduction as a whole to the logic of accumulation, it does not follow, as social reproductionists have long argued, that British households and communities became mere functional units geared towards reproducing the commodity labour-power and breeding the next generation of workers. A social and historical approach to people's lived reality in relation to food provisioning provides a strong basis towards appreciating the extent to which the food market itself was a historically specific, dynamic interface through which

[2] Isabella Bakker and Stephen Gill, 'Ontology, Method, and Hypotheses', in *Power, Production and Social Reproduction*, ed. Isabella Bakker and Stephen Gill (New York, 2003), p. 23.

people, especially housewives, remained active agents. Women shopped around, often over considerable distances, pawned, managed debts, compared food prices and quality, negotiated and devised countless strategies to make money go further and meet specific human needs foreign to the imperatives of the market. In this respect, abstract real wage figures, as important as they are, give us no clue as to how the money-wage was socially transformed in various ways in order to meet specific human needs.

In addition to seeing the food market as a dynamic site of struggle over social reproduction, this dissertation also suggests that the social relations encompassing food distribution are not reducible to the sphere of distribution in the formal economy. In the same way that the market does not encompass all the social and material practices essential to the daily and generational reproduction of human life, so too does distribution. Because women were the living nexus through which contradictions between households and markets were resolved, their bodies were themselves a material site of distribution in the allocation of food goods amongst members of the household and the community. In this respect, women embodied a different story, one that not only challenged the view that the formal economy somehow existed in abstraction from those social relations underpinning its very existence, but also undermining the view that food distribution is fundamentally a class issue connected to the labour market and the distribution of surpluses. In a very real and material sense, the cultivation of a theoretical and historical sensitivity for women's lived reality reveals the extent to which class does not exist outside, and cannot be abstracted from, other relations of lived reality such as gender, age, and race.

This dissertation also deepens the Marxian discussion of the raising of relative surplus-value by looking at the cheapening of the wage goods consumed by workers and their families. The cheapening of food, which, throughout the period under review, took the greatest proportion of the wage, and therefore represented the most important element of 'variable capital', was instrumental in at least two ways. From the perspective of capital, the cheapening of the value of labour-power through the cheapening of food meant the shortening of the labour-time necessary for the reproduction of the value of labour-power, and consequently both a condensing of necessary labour and the lengthening of surplus labour-time. From the perspective of labour, however, cheaper foodstuffs created a new consumption capacity through the control of a greater quantity of goods. Irrespective of political struggles, moral principles or ideological precepts, then, both capitalists and wage-labourers have an immediate economic interest in the subordination of landed interests and food producers to food consumers. At the level of total social capital, then, the rise of relative surplus-value through the cheapening of food goods is an important mechanism by which capitalists can increase surplus-labour time while maintaining, and even increasing, the working-class's ability to realise capital's potential for accumulation through the working class' higher capacity for consumption.

This process, however, is not without deep contradictions. For one, the origin of cheap food production was inseparable from the imperial and colonial net which Britain had cast over the globe. As suggested by the epigraph, it would indeed be my argument that cheap food imports were premised upon the exportation of capital's contradictions outside of Britain, contradictions which, by 1850, had reached striking levels of human

degradation and moral poverty. An investigation of the conditions under which cheap food was made available through the constitution of an international food system falls outside the scope of this dissertation, an investigation which awaits future research. Yet my dissertation has demonstrated that while the historical shift from a commitment to the control of surpluses and high prices for farmers to a commitment for growing surpluses and low prices for consumers constitutes the first movement towards cheap food production and the *potential* for rising real wages, its *realisation* would not have been possible without the ongoing development and subjugation of a distributive apparatus for the most part rooted in the lowering of the living standards of its members.

My discussion of the widespread adulteration of food and drink during the middle decades of the nineteenth century further deepens the concept of relative surplus-value. That widespread adulteration arose from chronic poverty and deficient supply rather than personal moral defect seems clear enough. Accordingly, it may be argued that adulteration was instrumental in maintaining an artificially lower value of labour-power than the same quantity basket of goods as 'pure' would have normally prescribed. Had adulteration been prohibited from the start, it is very likely that food prices would have been much higher, thus reinforcing the view that adulteration, though an obvious fraud, was itself a form of 'cheap food production.' As we saw, the relationship between cheap food and its adulteration was malleable, and many commissioners and witnesses on food adulteration found a certain level of morality in the practice if it allowed to bend the branch sufficiently enough for the poor to reach the fruit.

Now, if we push the implications of this just a little bit further, it becomes possible to look at the rapid expansion of the *legal* adulteration of food and drink during the post-World War II era, especially from the 1970s onwards, as both a vast new sector for capital accumulation and a method to raise the relative surplus-value through the cheapening of variable capital. In addition to the engineering of food, the rise of 'scientific' adulteration (e.g. high-fructose corn syrup, fillings) has played an important part of neoliberalism as a means of lowering the value of labour-power, increased surplus-labour time, and mediating crisis tendencies within the context of labour market restructuring. Analysing the continuities and historic specificity of the neoliberal moment in relation to the period documented here comprises an important trajectory for future research.

If anything, this dissertation has demonstrated that the sphere of distribution is a constitutive moment of the political economy of food. It mediates people's lives in fundamental ways, shaping their relation to both time and space in the procurement of the necessities of life. Perhaps the most fundamental contribution that this work has developed is that the sphere of distribution is not reducible to a sanitised and static moment of capital accumulation where exchange-values transit. By concealing the condition of work of those engaged in its daily maintenance and the dynamics animating them, the sphere of distribution in general and the food market in particular also tends to mask the extent to which distribution is a dynamic moment of mediation where people actively negotiate their access to the means of subsistence in relation to other concerns and demands.

Appendix A: Money, Weights and Measures

Old British Money
1 farthing = ¼ penny or ¼*d.*
Half penny (ha'penny) = ½*d.*
1 penny (1*d.*) refers to a copper coin
Threepence or Thruppenny Bit = 3*d.*
Sixpence (a silver coin also called a 'tanner') = 6*d.*
1 shelling (1*s.*) = 12*d.*
1 florin = 2*s.* or 24*d.*
1 pound (£1, also called a 'sovereign') = 20*s.* = 240*d.*
1 crown = 5*s.* = ¼£
A half-crown = 2*s.* 6*d.*

Mass
ounce (oz) = 1/16 lb
pound (lb) = 16 ounces
stone (st) = 14 lbs
quarter (qt) = 28 lbs
hundredweight (cwt) = 112 lbs
ton (t) = 2240 lbs = 20 undredweights or 80 quarters or 160 stones

Capacity
1 fluid ounce (fl oz) = 1/20 pint
1 pint (pt) = 20 ounces
1 quarter (qt) = 40 ounces = 2 pints
1 gallon (gal) = 160 ounces = 8 pints

Appendix B: Population

Selected cities (in thousands)

	1851	1861	1871	1881	1891	1901	1911
England and Wales	**17,983**	**20,119**	**22,789**	**26,046**	**29,086**	**32,612**	**36,136**
Greater London	2,685	3,227	3,890	4,770	5,638	6,586	7,256
Birmingham	233	296	344	437	478	523	840
Blackburn	47	63	85	104	120	129	133
Bradford	104	106	147	194	266	280	288
Bristol	137	154	183	207	289	339	357
Cardiff	18	33	57	83	120	164	182
Carlisle	26	29	31	37	39	45	52
Hull	85	98	122	166	200	240	278
Leeds	172	207	259	309	368	429	453
Leicester	61	68	95	137	175	212	227
Liverpool	376	444	493	553	630	704	753
Manchester	303	339	351	462	505	645	714
Newcastle	88	109	128	145	186	247	267
Newport	19	23	27	38	55	67	84
Nottingham	57	75	139	187	214	240	260
Plymouth	90	113	118	123	145	178	207
Portsmouth	72	95	114	128	159	189	234
Reading	21	25	32	49	60	81	88
Sheffield	135	185	240	285	324	409	465
Swansea	31	41	52	76	91	95	144
Wolverhampton	50	61	68	76	83	94	95
York	36	40	44	62	68	78	82
Scotland	**2,896**	**3,069**	**3,369**	**3,743**	**4,036**	**4,479**	**4,751**
Aberdeen	72	74	88	106	125	154	164
Dundee	79	91	119	140	154	161	176
Edinburgh (including Leith)	202	203	244	295	342	395	424
Glasgow	357	420	522	587	658	776	1,000
Greenock	37	43	58	67	63	68	75

Mitchell, *British Historical Statistics*, pp. 12-3, 25-29

Appendix C: Adulteration in England and Wales, 1877-1913

	Milk		Butter		Margarine		Coffee		Sugar		Confectionery & Jam		Beer		Tea		Bread		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
1877	4,435	24.1	916	10.8			723	17.5	253	0.4			666	9.3			998	7.4	14,706	19.2
1878	4,923	21.6	904	12.6			1,060	18.5	299	4.3			999	5.0			921	7.1	16,191	17.2
1879	5,654	19.4	1,306	13.0			1,244	18.9	243	0.4			434	3.6			1,287	7.3	17,049	14.8
1880	6,751	21.4	1,155	18.3			1,211	19.2	244	0.0			465	4.1			1,096	6.4	17,673	15.7
1881	6,926	19.5	1,353	13.9			1,224	18.3	284	0.3			326	2.4	1,242	1.3	1,037	4.7	17,823	14.7
1882	7,341	19.6	1,238	13.9			1,487	18.7	296	0.0			470	5.5	941	1.5	1,204	6.4	19,439	15.1
1883	8,119	20.0	1,311	18.0			1,208	19.1	270	0.0			402	2.0	852	0.0	1,041	2.7	19,648	15.0
1884	10,009	17.6	1,832	20.4			1,338	20.3	312	0.0			494	2.8	870	0.0	1,217	2.0	22,951	14.4
1885	9,850	14.7	2,001	18.9			1,347	16.4	246	0.0			339	1.2	1,430	0.3	1,168	2.7	23,230	13.2
1886	9,819	13.0	2,322	17.3			1,596	15.1	222	0.0	236	0.4	602	2.8	511	0.2	991	3.2	23,596	11.9
1887	10,333	14.9	2,411	17.5			1,269	13.3	158	0.0	286	6.6	803	2.2	423	0.2	872	1.9	24,440	12.8
1888	10,859	11.9	3,499	10.4			1,172	12.0	144	0.0	295	2.4	399	2.7	461	0.0	689	0.6	26,344	10.8
1889	11,610	13.2	2,679	12.9			1,397	14.9	188	0.0	394	4.6	400	2.5	443	0.5	952	2.2	26,954	11.5
1890	11,967	12.8	2,743	11.5			1,733	15.3	246	13.8	342	0.0	342	2.0	349	0.0	689	0.7	27,465	11.2
1891	12,151	13.4	3,558	15.5			1,684	17.0	171	4.7	403	2.7	268	4.1	412	0.0	799	1.0	29,028	12.2
1892	13,633	13.3	4,743	15.3			1,711	15.1	267	4.1	314	0.6	477	16.8	433	0.0	804	0.4	32,447	12.4
1893	15,543	14.9	5,784	13.7			1,848	11.6	237	1.3	347	2.0	363	4.4	394	0.0	698	0.1	37,233	12.9
1894	16,305	11.5	6,419	10.4			1,724	10.4	397	7.3	353	2.0	276	6.2	512	0.2	653	1.4	39,516	10.3
1895	18,307	11.1	7,186	8.2			2,046	10.0	353	1.7	370	1.1	330	2.1	443	0.0	575	1.7	43,962	9.3
1896	18,795	11.1	8,256	8.8			1,767	8.7	346	3.8	457	8.3	329	0.3	419	0.0	625	0.2	45,555	9.2
1897	18,896	10.4	8,164	10.3			1,906	9.6	747	7.5	658	5.3	217	2.8	463	0.2	630	1.4	46,856	9.4
1898	20,315	9.9	9,375	10.6			1,879	10.0	584	2.9	488	2.9	256	0.4	486	3.1	717	0.8	49,555	8.7
1899	21,964	10.5	10,478	9.7			1,929	7.5	575	5.9	511	2.7	239	0.8	565	0.4	597	0.5	53,056	9.4
1900	23,223	10.8	10,374	7.8			1,921	6.7	610	9.2	1,547	3.1	4,559	8.8	492	0.0	437	0.7	62,858	8.8
1901	26,143	11.2	11,938	10.3		1.6	1,883	7.3	836	13.4	2,824	2.9	3,960	5.6	463	0.2	530	0.8	67,841	8.8
1902	29,452	11.6	13,387	6.5	1,048	7.7	2,516	7.3	785	8.2	1,480	2.8	1,150	3.5	449	0.0	552	0.4	72,321	8.7
1903	33,090	10.4	13,766	5.5	992	3.5	2,410	6.4	954	8.1	1,492	4.1	769	2.3	448	0.0	561	0.0	78,077	7.9
1904	36,413	11.1	15,124	5.7	1,169	7.1	2,550	6.3	901	5.4	1,303	5.5	1,065	7.0	486	0.0	473	0.2	84,678	8.5
1905	39,841	10.5	16,287	6.9	1,217	4.8	2,663	6.6	759	3.7	1,295	3.3	676	2.5	575	0.0	463	0.2	86,182	8.2
1906	42,335	12.5	16,991	7.4	1,207	6.3	2,491	4.9	703	3.0	1,277	5.7	552	2.0	424	0.0	373	0.3	90,504	9.3
1907	44,364	10.5	18,176	6.6	1,232	4.2	2,179	5.0	630	4.0	1,239	3.1	638	5.8	395	0.3	528	0.8	93,716	8.1
1908	45,093	10.5	20,729	7.5	1,515	2.8	2,391	5.3	780	8.1	1,248	3.8	611	1.8	389	0.0	394	1.0	95,664	8.5

1909	46,678	9.7	21,134	5.7	1,482	3.6	2,384	5.1	656	5.9	1,104	3.4	793	0.9	478	0.0	352	0.6	98,536	7.5
1910	47,895	11.1	20,742	5.1	1,831	3.2	2,189	5.1	666	3.3	1,239	4.7	573	3.0	500	1.4	327	0.0	100,749	8.2
1911	50,849	11.9	20,887	5.1	1,623	2.8	2,101	5.7	784	4.0	1,123	3.0	579	5.5	491	0.0	618	0.2	103,221	8.7
1912	52,501	10.9	21,721	6.0	1,863	2.1	2,312	4.8	767	5.1	1,148	5.5	620	5.5	479	0.0	414	0.0	108,174	8.4
1913	52,539	10.6	21,932	5.2	1,875	2.6	2,305	3.7	738	10.8	1,258	6.8	637	2.4	430	0.0	405	4.0	108,157	8.2

Source: Annual Report of the Local Government (number of samples taken per year and percentage of adulteration).

Works Cited

Parliamentary Papers

Census

Census of Great Britain, 1851, Table 2, Vol. 1, *PP* LXXXVIII, Part I.1 (1852-53).

Census of Great Britain, 1851, Table 2, Vol. 2, *PP* LXXXVIII, Part II.1 (1852-53).

Census of England and Wales, 1861, General Report, *PP* LIII, Part I.1 (1863).

Census of Scotland, 1861, Vol. 2, *PP* LI.49 (1864).

Census of England and Wales, 1871, Vol. 3, *PP* LXXI, Part. 1.1 (1873).

Census of Scotland, 1871, Vol. 2, *PP* LXXIII.1 (1873).

Census of England and Wales, 1901, General Report, *PP* CVIII.1 (1904).

Census of England and Wales, 1911, General Report, *PP* XXXV.483 (1917-18).

Census of Scotland, 1911, Vol. 2, *PP* LXXX.45 (1913).

Health and General Condition

'First Report of the Metropolitan Sanitary Commission', *PP* XXXII.1 (1847-48).

'Third Report of the Metropolitan Sanitary Commission', *PP* XXXII.339 (1847-48).

'Fifth Report of the Medical Officer of the Privy Council', *PP* XXV (1863).

Gamgee, John. 'Cattle Diseases in Relation to Supply of Meat and Milk', in *Fifth Report of the Medical Officer of the Privy Council*, Appendix IV, pp. 206-298.

Edward Smith, 'Report on the Nourishment of the Distressed Operative', in 'Fifth report of the Medical Officer of the Privy Council', *PP* XXV (1863), Appendix V.3, pp. 320-456.

Edward Smith, 'Report on the Food of the Poorer Labouring Classes in England', in 'Sixth report of the Medical Officer of the Privy Council', *PP* XXVII.1 (1864), Appendix 6, pp. 219-33.

Ogle, William. 'Supplement to the forty-fifth annual report of the Registrar-General of Births, Deaths, and Marriages in England', *PP* XVII (1884-85), pp. iii-lxiv.

'Report of the departmental committee on defective and epileptic children', *PP* XXVI.1, 49 (1898).

'Royal Commission on Physical Training (Scotland)', Vol. 1, *PP* XXX.1 (1903).

IDCPD, Vol. 1, *PP* XXXII.1 (1904).

IDCPD, Vol. 2, *PP* XXXII.145 (1904).

IDCPD, Vol. 3, *PP* XXXII.655 (1904).

Food

William A. Guy, 'Baking trade. Copy of the evidence given by Dr Guy before the Sanitary Commission, in reference to the persons employed in the trade', *PP* LI (1847-48).

'Report from the Select Committee on Adulteration of Food, &c.,' *PP* VIII (1856).

E. Headlam Greenhow, 'Report on Murrain in Horned Cattle, the Public Sale of Diseases Animals, and the Effects of the Consumption of their Flesh on Human Health', *PP* XX (1857).

'Report addressed to Her Majesty's Principal Secretary of State for the Home Department, relative to the grievances complained of by the journeymen bakers; with appendix of evidence', *PP* XLVII (1862).

Tremenheere, Hugh Seymour. 'Second report addressed to Her Majesty's Principal Secretary of State for the Home Department, relative to the grievances of by the journeyman bakers', *PP* XXVIII (1863).

'Diseased and Unsound Meat', *PP* XLVIII (1863).

Tremenheere, Hugh Seymour. 'Bakehouses Regulation Act. Copies of reports by Mr Tremenheere upon the working of the Bakehouses Regulation Act, 1863; and, of correspondence as to the complaints made by operative bakers that the act has not been enforced', *PP* XLVII (1865).

'First report of the commissioners appointed to inquire into the origin and nature of the cattle plague', *PP* XXII.1 (1866).

'Second report of the commissioners appointed to inquire into the origin and nature of the cattle plague', *PP* XXII.227 (1866).

'Third report of the commissioners appointed to inquire into the origin and nature of the cattle plague', *PP* XXII.321 (1866).

'Fourth Report of the Royal Commission on Inspection of Weights and Measures', *PP* XXVII.249 (1870).

'Report from the Select Committee on Contagious Diseases (Animals)', *PP* XI.189 (1873).

'Report for the Select Committee on Adulteration of Food Act (1872); together with the proceedings of the minutes of evidence, and appendix', *PP* VI (1874).

'Butter Analysis', *PP* LIX (1876).

'Report from the Select Committee on Cattle Plague and Importation of Live Stock; together with the proceedings of the committee,, minutes of evidence, and appendix', *PP* IX.1 (1877).

'Report on Eruptive Diseases of the Teats and Udders of Cows in Relation to Scarlet Fever in Man', *PP* XXXII (1888).

'Report from the Select Committee on Food Products Adulteration', *PP* XII.1 (1894).

'Report from the Departmental Committee on Milk and Cream Regulations', *PP* XXX.371 (1901).

'Report of the Departmental Committee on Food Preservatives', *PP* XXXIV.579 (1902).

'Report of the Departmental Committee on Fruit Culture in Great Britain', *PP* XXIV (1905).

Annual Report of the Local Board of Government

'Third ARLGB', *PP* XXV (1874).

'Seventh ARLGB', *PP* XXXVII, Part. I (1878).

'Ninth ARLGB', *PP* XXVI.1 (1880).

'Twelfth ARLGB', *PP* XXVIII (1883).

'Eighteenth ARLGB', *PP* XXXV (1889).

'Twenty-Eighth ARLGB', *PP* XXXVII (1899).

'Twenty-Ninth ARLGB', *PP* XXXIII, Part I (1900).

'Thirty-Fourth ARLGB', *PP* XXXI, Part I (1905).

'Thirty-Seventh ARLGB', *PP* XXX, Part I (1908).

'Forty-First ARLGB', *PP* XXXV, Part I (1912).

'Thirty-Eighth ARLGB', *PP* XXIX.1 (1909).

Royal Commission on Market Rights and Tolls
RCMRT, Vol. 1, *PP* LIII.1 (1888).

RCMRT, Vol. 2, *PP* LIII.237 (1888).

RCMRT, Vol. 3, *PP* LIV.1 (1888).

RCMRT, Vol. 4, *PP* LV.1 (1888).

RCMRT, Vol. 7, *PP* XXXVII.243 (1890-91).

RCMRT, Vol. 9, *PP* XXXVIII.225 (1890-91).

RCMRT, Vol. 11, Final Report, *PP* XXXVII.1 (1890-91).

RCMRT, Vol. 13, Part 1, *PP* XXXIX.665 (1890-91).

RCMRT, Vol. 13, Part 2, *PP* XL.1 (1890-91).

RCMRT, Vol. 13, Part 3, *PP* XLI.1 (1890-91).

Labour, Housing and Immigration
'Report from the Select Committee on Artizans' and Labourers' Dwellings Improvement; together with the proceedings of the committee, minutes of evidence, and appendix', *PP* VII.395 (1881).

'First Report from the Royal Commission for inquiring into the housing of the working classes', *PP* XXX.1 (1884-85).

'Royal Commission on Labour, Vol. 23, The Employment of Women', *PP* XXXVII, Part I.545 (1893-94).

'Elementary schools (children working for wages)', *PP* LXXV.433 (1899).

'Inter-Departmental Committee on Employment of School Children, Report', *PP* XXV.261 (1902).

'Inter-Departmental Committee on the Employment of School Children, Minutes of evidence', *PP* XXV.287 (1902).

'Royal Commission on Alien Immigration, Vol. 2, Minutes of evidence', *PP* IX.61 (1903).

'Report from the Joint Select Committee on Sunday Trading', *PP* XIII.29 (1906).

'Report of the Royal Commission on the Poor Laws and Relief of Distress', *PP* XXXVII.1 (1909).

'Royal Commission of the Poor Laws and Relief Distress, Vol. 20, Boy Labour', *PP* XLIV.921 (1909).

'Departmental Committee on the Employment of Children Act, 1903, Report', *PP* XXVIII.1 (1910).

'Departmental Committee on the Employment of Children Act, 1903, Minutes of evidence', *PP* XXVIII.25 (1910).

Railways, Waterways and Traffic

'An account of the number of licences granted to hawkers and pedlars, 1817-23', *PP* XVIII.225 (1824).

'Return of the number of hawkers licensed in England, Ireland and Scotland, 1830-43', *PP* XXXII.377 (1844).

'Fifth report from the Select Committee on Railways; together with the minutes of evidence, appendix and index', *PP* XI (1844).

'Report of the Royal Commission of Railways', *PP* XXXVIII, Part 1 (1867).

'Report from the Joint Select Committee of the House of Lords and the House of Commons, on railway companies amalgamation; together with the proceedings of the committee, minutes of evidence, and appendix', *PP* XIII, Part I (1872).

'Report from the Select Committee on Railways; together with the proceedings of the committee, minutes of evidence, and appendix', *PP* XIII-IV, Part 1 & 2 (1881).

'Report from the Select Committee on Railways (Rates and Fares); together with the proceedings of the committee, minutes of evidence, and appendix', *PP* XIII.1 (1882).

'Royal Commission on London Traffic', Vol. 2, *PP* XI (1906).

'Royal Commission on London Traffic' Vol. 3, *PP* XLI (1906).

'Departmental Committee on Railway rates (preferential treatment)', *PP* LV (1906).

'Report of the Royal Commission on Canals and Waterways', Vol. 4, *PP* XXXIII (1907).

'Fourth and Final Report of the Royal Commission on Canals and Waterways', Vol. 7, *PP* XII (1910).

'Departmental Committee on Railway Accounts and Statistical Returns', *PP* LVI (1910).

'Railway returns. Returns of the capital, traffic, receipts, and working expenditure of the railway companies of the United Kingdom for the year 1912', *PP* LXXV (1913).

Newspapers and Periodicals

The British Medical Journal
The Church of England Magazine
The Cornhill Magazine
The Dublin Review
The Lancet
Liverpool Albion
The London City Mission Magazine
The London Times
The New York Times
Once a Week
Quarterly Review
Journal of the Society of Arts
The Star
Strand Magazine

Secondary Sources

Books and book chapters

Accum, Fredrick. *A Treatise on Adulterations of Food, and Culinary Poisons* (London, 1820).

Alden, Margaret. *Child Life and Labour* (London, 1908).

Arlidge, John Thomas. *The Hygiene, Diseases and Mortality of Occupations* (London, 1892).

Aves, Ernest. *Co-operative Industry* (London, 1907).

Baxter, Arthur. 'Grocers, Oil and Colourmen, &c.', in *Life and Labour of the People in London*, Vol. 7: Population Classified by Trades, ed. Charles Booth (London, 1896), pp. 214-29.

Beesley, George. *A Report of the State of Agriculture in Lancashire* (Preston, 1849).

Beeton, Isabella. *The Book of Household Management* (London, 1861).

Bell, Lady. *At the Works: A Study of a Manufacturing Town* (London, 1907).

Booth, Charles (ed.). *Labour and Life of the People*, Vol. 1: East London (London, 1889).

Booth, Charles (ed.). *Labour and Life of the People*, Vol. 2: London, Second Edition (London, 1891).

Booth, Charles. 'Shopkeepers and General Dealers', in *Life and Labour of the People in London*, Vol. 7: Population Classified by Trades, ed. Charles Booth (London, 1896), pp. 247-58.

Booth, Charles. *Life and Labour of the People in London*, Vol. 4: Inner South London (London, 1902).

Booth, Charles and Stephen N. Fox, 'Bakers and Confectioners', in *Life and Labour of the People*, Vol. 7: Population Classified by Trades, ed. Charles Booth (1896), pp. 143-71.

Bosanquet, Helen. *Rich and Poor* (London, 1908[1896]).

Bowley, Arthur L. and A. R. Burnett-Hurst. *Livelihood and Poverty: A Study in the Economic Conditions of Working-Class Households in Northampton, Warrington, Stanley and Reading* (London, 1915).

Bowley, Arthur L. and A. R. Burnett-Hurst. *Economic Conditions of Working-class Households in Bolton, 1914: Supplementary Chapter to 'Livelihood and Poverty'* (London, 1920).

Bowmaker, Edward. *The Housing of the Working Classes* (London, 1895).

Bremner, Robert. *Excursions in the Interior of Russia*, Vol. 1 (London, 1839).

Caird, James. *The Landed Interest and the Supply of Food* (London, 1880).

Cloete, J. G. 'The Boy and His Work', in *Studies of Boy Life in Our Cities*, ed. E. J. Urwick (London, 1904), pp. 102-38.

Clopper, Edward N. *Child Labor in City Streets* (New York, 1913).

Co-operative Wholesale Society, *Annual* (Manchester and Glasgow, 1918).

Critchell, James Troubridge and Joseph Raymond, *A history of the frozen meat trade: an account of the development and present day methods of preparation, transportation, and marketing of frozen and chilled meats* (London, 1912).

Cunningham, Peter. *London in 1857* (London, 1857).

Davies, Maude Frances. *Life in an English Village: An Economic and Historical Survey of the Parish of Corsley in Wiltshire* (London, 1909).

Dendy, Helen. 'The Industrial Residuum', *The Economic Journal*, Vol. 3, No. 12 (1893).

Dickens, Charles. *The Adventures of Oliver Twist*, (London, 1850).

Dickens, Jr, Charles. *Dickens's dictionary of London, 1879. An unconventional handbook* (London, 1882).

Dodd, William. *The Laboring Classes of England*, Second Edition (Boston, 1848[1847]).

Dodd, George. *The food of London* (London, 1856).

Engels, Friedrich. *The Condition of the Working Class in England* (Oxford, 2009[1845]).

Folio, Felix. *The Hawkers and Street Dealers of the North of England Manufacturing Districts* (Manchester, 1859).

Gamgee, John. *Diseased Meat sold in Edinburgh, and Meat Inspection, in Connection with the Public Health, and with the Interest of Agriculture* (Edinburgh, 1857).

Gibb, Spencer J. 'Boy Labour: Some Studies in Detail', in *Problems of Boy Life*, ed. John Howard Whitehouse (London, 1912), pp. 52-78.

Greenwood, James. *The Seven Curses of London* (London, 1869).

Greenwood, James. *In Strange Company: Being the Experiences of a Roving Correspondent* (London, 1883[1873]).

Greenwood, James. *The Wilds of London* (London, 1874).

Hardy, Harold. 'Costers and Street Sellers', in *Life and Labour of the People in London*, Volume 7: Population Classified by Trades, ed. Charles Booth (London, 1896), pp. 259-71.

Hassall, Arthur Hill. *Food and its Adulterations* (London, 1855).

Hindley, Charles (ed.), *The Life and Adventures of A Cheap Jack* (London, 1876).

Holyoake, George Jacob. *The History of Co-operation in England: Its Literature and its Advocate*, Volume I, The Pioneer Period—1812 to 1844 (London, 1875).

Holyoake, George Jacob. *The History of Co-operation in England: Its Literature and its Advocates*, Vol. II, The Constructive Period—1845 to 1878 (London, 1885).

Howarth, Edward G. and Mona Wilson. *West Ham: A Study in Social and Industrial Problems* (London, 1907), pp. 34-5.

Jackson, Edward. *A study in democracy: being an account of the rise and progress of industrial co-operation in Bristol* (Manchester, 1911).

Jenner, William. *Clinical Lecture and Essays on Rickets, Tuberculosis, Abdominal and Other Subjects* (London, 1895).

Johnson, Samuel. *A Dictionary of the English Language*, Vol. 1, Sixth edition (London, 1785[1755]).

Johnson, Samuel. *Johnson's Dictionary* (Boston, Ma, 1836).

Johnson, Samuel and John Walker. *Dictionary of the English Language*, Second Edition (London, 1828).

Knight, Charles. *Knight's Cyclopaedia of the Industry of All Nations* (London, 1851).

Lahr, Johanna. *The Poorest of the Wage-Slaves* (London, 1889).

Lardner, Dionysius. *Railway Economy: A Treatise on the New Art of Transport* (London, 1850).

Lhorky, J. *On Cases of Death by Starvation, and Extreme Distress among the Humbler Classes, considered as one of the Main Symptoms of the Present Disorganization of Society; with a Preparatory plan for Remedying these Evils in the Metropolis and other Large Cities* (London, 1844).

London, Jack. *The People of the Abyss* (London, 2001[1903]).

Macrosty, Henry W. *The Trust Movement in British Industry: A Study of Business Organisation* (Kitchener, 2001 [1907]).

Malvery, Olive Christian. *The Soul Market* (London, 1907).

Manby Smith, Charles. *Curiosities of London Life: Or, Phases, Physiological and Social, of the Great Metropolis* (London, 1857[1853]).

Manby Smith, Charles. *The Little world of London* (London, 1857).

Marlowe, Christopher. *The Works of Christopher Marlowe*, Vol. 2 (London, 1826).

Marx, Karl. *Grundrisse* (London, 1993[1857-61]).

Marx, Karl. *Inaugural Address and Provisional Rules of the International Working Men's Association* (London, 1864). Retrieved from: http://www.marxists.org/archive/marx/works/1864/10/27.htm.

Marx, Karl. *Capital*, Volume I (London, 1990[1867]).

Mayhew, Henry. *London Labour and the London Poor*, Vol. I (London, 1861[1851]).

Mayhew, Henry. *London characters: Illustrations of the humour, pathos, and peculiarities of London life* (London, 1881).

Milburn, Matthew Marmaduke. *The Cow: Dairy Husbandry and Cattle Breeding* (New York, 1852[1851]).

Mitchell, John. *Treatise of the Falsifications of Food, and the Chemical Means Employed to Detect them* (London, 1848).

Morrison, Arthur. *Tales of Mean Streets* (New York, 1895[1894]).

Pember Reeves, Maud. *Round About a Pound a Week* (London, 1914).

Poole, Braithwaite. *Statistics of British Commerce* (London, 1852).

Poyntz, Juliet Stuart. 'Introduction: Seasonal Trades,' in *Seasonal Trades*, ed. Sidney Webb and Arnold Freeman (London, 1912), pp. 1-69.

Redfern, Percy. *The Story of the C.W.S., 1863-1913* (Manchester, 1913).

Redfern, Percy. *The Consumers' Place in Society* (Manchester, 1920).

Rowntree, B. Seebohm. *Poverty: A Study of Town Life* (New York, 1971[1901]).

Salt, Samuel. *Facts and Figures, principally relating to Railways and Commerce* (London, 1848).

Sherwell, Arthur. *Life in West London: A Study and a Contrast* (London, 1901[1897]).

Smith, Adam. 'The Nature and Causes of the Wealth of Nations', in *The Works of Adam Smith*, Vol. 3, ed. Stewart Dugald (London, 1811).

Smith, Edward. *Practical Dietary for Families, Schools, and the Labouring Classes* (London, 1865).

Sullivan, James William. *Markets for the People: The Consumer's Part* (New York, 1913).

Tabor, Mary C. 'Elementary Education', in *Labour and Life of the People*, Vol. 2: London, Second Edition, ed. Charles Booth (1891), pp. 486-526.

Tawney, R. H. 'The Economics of Boy Labour', in *Problems of Boy Life*, ed. John Howard Whitehouse (London, 1912), pp. 17-51.

Thomson, J. and Adolphe Smith. *Street Life in London* (London, 1877).

Tuckwell, Gertrude M. and Constance Smith, *The Worker's Handbook* (London, 1908).

Ure, Andrew. *A Dictionary of Arts, Manufactures, and Mines: Containing a Clear Exposition of their Principles and Practice* (Boston, 1853).

Valpy, Abraham J. (ed.). *The Plays and Poems of Shakespeare*, Vol. 7 (London, 1857).

Wells, Herbert G. *The History of Mr. Polly* (New York, 1909).

Williams, Alfred. *Life in a Railway Factory* (London, 1920 [1915]).

Zangwill, Israel. *Children of the Ghetto: A Study of a Peculiar People* (London, 1896[1892]).

Articles

'Sykes, W. H. and F. G. P. Neison, 'Report on the State of the Inhabitants and their Dwellings in Church Lane, St. Giles's', *Journal of the Statistical Society of London*, Vol. 11, No. 1 (1848), pp. 1-18

'Report into the State of the Poorer Classes in St. George's in the East', *Journal of the Statistical Society of London*, Vol. 11, No. 3 (1848), pp. 193-249.

Barfoot-Saunt, W. H. et al. 'Production and Consumption of Meat and Milk, Second Report from the Committee Appointed to Inquire into the Statistics Available as a Basis for Estimating the Production and Consumption of Meat and Milk in the United Kingdom', Journal of the Royal Statistical Society, Vol. 67, No. 3 (1904), pp. 368-384.

Barfoot-Saunt, W. H. et al. 'Production and Consumption of Meat and Milk, Third Report', *Journal of the Royal Statistical Society*, Vol. 67, No. 3 (1904), pp. 385-93.

Bear, William E. 'The Food Supply of Manchester', Part 1: Vegetable Produce, *Journal of the Royal Agricultural Society of England*, Vol. 8, Third Series (London, 1897), pp. 205-28.

Bear, William E. 'The Food Supply of Manchester', Part 2: Animal Produce, *Journal of the Royal Agricultural Society of England*, Vol. 8, Third Series (London, 1897), pp. 490-515.

Bondfield, Margaret G. 'Conditions Under which Shop Assistants Work', *The Economic Journal*, Vol. 9, No. 34, 1899, pp. 277-86.

Farr, William. 'The Influence of Scarcities and of the High Prices of Wheat on the Mortality of the People of England', *Journal of the Statistical Society of London*, Vol. 9, No. 2 (1846), pp. 158-74.

Galton, Francis. 'Final Report of the Anthropometric Committee', *Report of the Fifty-Third Meeting of the British Association for the Advancement of* Science, 1883 (London, 1884), pp. 253-306.

Giffen, Robert. 'On the Fall of Prices of Commodities in Recent Years', *Journal of the Statistical Society of London*, Vol. 42, No. 1 (1879), pp. 36-78.

Greenwood, Arthur. 'Blind-Alley Labour', *The Economic Journal*, Vol. 22, No. 86 (1912), pp. 309-14.

Manby, E.F. 'Cultivation of Early Potatoes', *Journal of the Royal Agricultural Society of England*, First Series, Vol. 18 (1857), pp. 98-111.

Mann, P. H. 'Life in an Agricultural Village in England', *Sociological Papers*, Vol. 1 (1904), pp. 163-93.

Page, John. 'The Sources of Supply of the Manchester Fruit and Vegetable Markets', *Journal of the Royal Agricultural Society of England*, Vol. 16 (1880), pp. 475-85.

Rew, R. Henry. 'An Inquiry into the Statistics of the Production and Consumption of Milk and Milk Products in Great Britain', *Journal of the Royal Statistical Society*, Vol. 55, No. 2 (1892), pp. 244-86.

Shaw, Alexander. 'Of a Peculiarity in the Conformation of the Skeleton in Rickets', *Medico-Chirurgical Transactions*, Vol. 17 (1832), pp. 434-72.

Shaw, Alexander. 'On the Effects of Rickets upon the Growth of the Skull', *Medico-Chirurgical Transactions*, Vol. 26 (1843), pp. 336-67.

Thompson, Harry Stephen. 'Address of the President to the General Meeting, held December 12, 1866', *Journal of the Royal Agricultural Society of England*, Second Series, Vol. 3 (1867), pp 428-36.

Thomson, James. 'On the Prevalence of Rickets in the City of Glasgow and in the West of Scotland, and the Relation of Rickets to the Food and Water Used', *Proceedings of the Philosophical Society of Glasgow*, Vol. 15, 1884, pp. 232-59.

Wood, George H. 'Real wages and the standard of comfort since 1850', *Journal of the Royal Statistical Society*, Vol. 73 (1909), pp. 91-103.

Fabian Tracts

Webb, Sidney. *The Scandal of London's Markets*, No. 36 (London, 1891).

Shaw, George Bernard. *The Impossibilities of Anarchism*, No. 45 (London, 1895).

Johnson, William. *Shop Life and its Reform*, No. 80 (London, 1897).

McCleary, George F. *The Municipalization of the Milk Supply*, No. 90 (London, 1899).

McCleary, George F. *Municipal Bakehouses*, No. 94 (London, 1900).

Edwards, Clement et al. *The House Famine and How to Relieve it*, No. 101 (London, 1900).

Steadman, W. C. *Overcrowding in London and its Remedy*, No. 103 (London, 1900).

Dodd, F. Lawson. *Municipal Milk and Public Health*, No. 122 (London, 1905).

Dale, Mrs Hylton. *Child Labor under Capitalism*, No. 140 (London, 1908).

Pember Reeves, Maud. *Family Life on a Pound a Week*, No. 162 (London, 1914[1912])

Tertiary Sources

Aldcroft, Derek H. 'The Eclipse of British Coastal Shipping, 1913-21', *Journal of Transport History*, Vol. 6, No. 1 (1963), pp. 24-38.

Aldcroft, Derek H. 'The Depression in British Shipping, 1901-1911', *Journal of Transport History*, Vol. 7, No. 1 (1965), pp. 14-23.

Alexander, David G. *Retailing in England during the Industrial Revolution* (London, 1970).

Allen, Robert C. 'The Great Divergence in European Wages and Prices from the Middle Ages to the First World War', *Explorations in Economic History*, Vol. 38, No. 4 (2001), pp. 411-47.

Armstrong, John. 'The role of coastal shipping in UK transport: An estimate of comparative traffic movements in 1910', *Journal of Transport History*, Series 3, Vol. 8, No. 2 (1987), pp. 164-78.

Armstrong, John. 'Freight pricing policy in coastal liner companies before the First World War', *Journal of Transport History*, Series 3, Vol. 10, No. 2 (1989), pp. 180-97.

Armstrong, John. 'Climax and Climacteric: The British Coastal Trade, 1870-1930', in *Exploiting the Sea: Aspects of Britain's Maritime Economy since 1870*, ed. David J. Starkey and Alan G. Jamieson (Exeter, 1998), pp. 37-58.

Armstrong, W. A. 'The Trend of Mortality in Carlisle between the 1780s and the 1840s: A Demographic Contribution to the Standard of Living Debate', *The Economic History Review*, New Series, Vol. 34, No. 1 (1981), pp. 94-114.

Ashton, Thomas S. 'The Standard of Life of the Workers in England, 1790-1830', *Journal of Economic History*, Vol. 9, Supplement (1949), pp. 19-38.

Atkins, Peter J. 'London's Intra-Urban Milk Supply, circa 1790-1914', *Transactions of the Institute of British Geographers*, New Series, Vol. 2, No. 3 (1977), pp. 383-99.

Atkins, Peter J. 'The Growth of London's Railway Milk Trade, c.1845-1914', *Journal of Transport History*, New Series, Vol. 4, No. 4 (1978), pp. 208-26.

Atkins, Peter J. 'Sophistication Detected: Or, the Adulteration of the Milk Supply, 1850-1914', *Social History*, Vol. 16, no. 3 (1991), pp. 317-39.

Atkins, Peter J. 'White Poison? The Social Consequences of Milk Consumption, 1850-1930', *Social History of Medicine*, Vol. 5, no. 2 (1992), pp. 207-227.

Atkins, Peter J. 'Milk consumption and tuberculosis in Britain, 1850-1950', in *Order and Disorder: The Health Implications of Eating and Drinking in the Nineteenth and Twentieth Centuries*, ed. Alexander Fenton (East Linton, 2000), pp. 83-95.

Atkins, Peter J. 'The pasteurization of milk in England: the science, culture and health implications of milk processing, 1900-1950', in *Food, Science, Policy and Regulation in the 20th Century*, ed David F. Smith and Jim Phillips (London, 2000), pp. 37-51.

Backstrom, Philip N. *Christian Socialism and Co-operation in Victorian England* (London, 1974).

Bagwell, Philip S. *The Railway Clearing House in the British Economy 1842-1922* (London, 1968).

Bailey, Peter. *Leisure and Class in Victorian England* (London, 1986).

Bakker, Isabella and Stephen Gill. 'Ontology, Method, and Hypotheses', in *Power, Production and Social Reproduction*, ed. Isabella Bakker and Stephen Gill (New York, 2003).

Barnes, F. A. 'The Evolution of the Salient Patters of Milk Production and Distribution in England and Wales', *Transactions of the Institute of British Geographers*, No. 25 (1958), pp. 167-95.

Barrymore Smith, Francis. *The People's Health 1830-1910* (New York, 1979).

Beavington, F. 'The Development of Market Gardening in Bedfordshire 1799-1939', *The Agricultural History Review*, Vol. 23, No. 1 (1975), pp. 23-47.

Benson, John. *The Penny Capitalists: A study of Nineteenth-century working-class Entrepreneurs* (Dublin, 1983).

Benson, John. *The Rise of Consumer Society in Britain, 1880-1980* (London, 1994).

Birchall, Johnston. *Co-op: the people's business* (Manchester and New York, 1994).

Birchall, Johnston. *The International co-operative movement* (Manchester and New York, 1997).

Blackman, Janet. 'The Food Supply of an Industrial Town', *Business History*, Vol. 5, No. 2 (1963), pp. 83-97.

Blackman, Janet. 'The Development of the Retail Grocery Trade in the Nineteenth Century', *Business History*, Vol. 9, No. 2 (1967), pp. 110-7.

Blackman, Janet. 'The Cattle Trade and Agrarian Change on the Eve of the Railway Age', *The Agricultural History Review*, Vol. 23, No. 1 (1975), pp. 48-62.

Blackman, Janet. 'The Corner Shop: The Development of the Grocery and General Provisions Trade', in *The Making of the Modern British Diet*, ed. Derek J. Oddy and Derek S. Miller (Totowa, 1976), pp. 148-60.

Bohstedt, John. *Riots and Community Politics in England and Wales, 1790-1810* (Cambridge, 1983); John Bohstedt, 'The Moral Economy and the Discipline of Historical Context', *Journal of Social History*, Vol. 26, No. 2 (1992), pp. 265-84.

Bohstedt, John. 'The Moral Economy and the Discipline of Historical Context', *Journal of Social History*, Vol. 26, No. 2 (1992), pp. 265-84.

Bohstedt, John. *The Politics of Provisions: Food Riots, Moral Economy, and Market Transition in England, c.1550-1850* (Farnham, 2010)

Bowley, Arthur L. *Wages and income in the United Kingdom since 1860* (Cambridge, 1937).

Bradley, John. *Cadbury's Purple Reign: The Story Behind Chocolate's Best-Loved Brand* (West Sussex, 2008).

Briggs, Asa. *Victorian Cities* (London, 1990[1963]).

Brooke, D. 'The Struggle between Hull and the North Eastern Railway 1854-80', *Journal of Transport History*, New Series, Vol. 1, No. 4 (1972), pp. 220-37.

Brown, John C. 'The Condition of England and the Standard of Living: Cotton Textiles in the Northwest, 1806-1850', *The Journal of Economic History*, Vol. 50, No. 3 (1990), pp. 591-614.

Brown, Jonathan. *The English Market Town: A Social and Economic History 1750-1914* (Marlborough, 1986)

Burnett, John. 'The Baking Industry in the Nineteenth Century', *Business History*, Vol. 5, No. 2 (1863), pp. 98-108.

Burnett, John. 'Trends in Bread Consumption', in *Our Changing Fare: Two Hundred Years of British Food Habits*, in Theodore C. Barker, John C. McKenzie and John Yudkin (London, 1966), pp. 61-75.

Burnett, John. *A Social History of Housing* (London, 1978).

Burnett, John. *Plenty & Want: A social history of diet in England from 1815 to the present day* (London, 1979[1966]).

Burnett, John. *Liquid Pleasures: A Social History of Dinks in Modern Britain* (London, 1999).

Burnham, Peter, Karin Gilland, Wyn Grant and Zig Layton-Henry. *Research Methods in Politics* (New York, 2004).

Cage, R. A. 'The Standard of Living Debate: Glasgow, 1800-1850', *The Journal of Economic History*, Vol. 43, No. 1 (1983), pp. 175-82.

Cage, R. A. *The Working Class in Glasgow, 1750-1914* (Beckenham, 1987).

Cain, P. J. 'Traders versus Railways: The Genesis of the Railway and Canal Traffic Act of 1894', *Journal of Transport History*, New Series, Vol. 2, No. 2 (1973), pp. 65-84.

Chaloner, W. H. 'Trends in Fish Consumption', in *Our Changing Fare: Two Hundred Years of British Food Habits*, ed. T.C. Barker, J.C. McKenzie and J. Yudkin (London, 1966), pp. 94-114.

Chandler, Ann-Marie K. et al. 'School Breakfast Improves Verbal Fluency in Undernourished Jamaican Children', *The Journal of Nutrition*, Vol. 125, No. 4 (1995), pp. 894-900.

Channon, Geoffrey. 'The Aberdeenshire beef trade with London: a study in steamship and railway competition, 1850-69', *Journal of Transport History*, Vol. 2, No. 1 (1969), pp. 1-24.

Chesney, Kellow. *The Victorian Underworld* (London, 1970).

Clapham, John H. *An Economic History of Modern Britain: The Early Railway Age, 1820-50* (Cambridge, 1939[1926]).

Clark, Gregory, Michael Huberman and Peter H. Lindert. 'A British food puzzle, 1770-1850', *The Economic History Review*, New Series, Vol. 48, No. 2 (1995), pp. 215-37.

Clarke, David B. and Martin Purvis. 'Dialectics, difference, and the geographies of consumption', *Environment and Planning A*, Vol. 26 (1994), pp. 1091-1109.

Cole, G.D.H. *A Century of Co-operation* (Reddish, 1945).

Crafts, Nicholas F. R. 'English Workers' Real Wages During the Industrial Revolution: Some Remaining Problems', *The Journal of Economic History*, Vol. 45, No. 1 (1985), pp. 139-44.

Cross, Gary. *A Quest for Time: The Reduction of Work in Britain and France, 1840-1940* (Berkeley, 1989).

Crossick, Geoffrey. 'The petite bourgeoisie in nineteenth-century Britain: the urban and liberal case', in *Shopkeepers and Master Artisans in Nineteenth-Century Europe*, ed. Geoffrey Crossick and Heinz-Gerhard Haupt (London and New York, 1984), pp. 62-94.

Crossick, Geoffrey. 'Shopkeepers and the state in Britain, 1870-1914', in *Shopkeepers and Master Artisans in Nineteenth-Century Europe*, pp. 239-69.

Davies, Andrew. *Leisure, Gender and Poverty: Working-class culture in Salford and Manchester, 1900-1939* (Buckingham, 1992).

Davis, Ralph. *The Industrial Revolution and British Overseas Trade* (Leicester, 1979).

Daunton, Martin J. *House and Home in the Victorian City: Working-Class Housing 1850-1914* (London, 1983).

Daunton, Martin (ed.). *The Cambridge Urban History of Britain*, Volume III, 1840-1950 (Cambridge, 2000).

Dingle, Anthony E. 'Drink and Working-Class Living Standards in Britain, 1870-1914', in *The Making of the Modern British Diet*, ed. Derek Oddy and Derek Miller (London, 1976), pp. 117-34.

Drummond, Jack C. and Anne Wilbraham, *The Englishman's Food: Five Centuries of English Diet* (London, 1991).

Dunnigan, M. 'Commentary: John Snow and alum-induced rickets from adulterated London bread: an overlooked contribution to metabolic bone disease', *International Journal of Epidemiology*, Vol. 32, No. 3 (2003), pp. 340-1.

Engerman, Stanley L. 'Reflection of 'The Standard of Living Debate': New Arguments and New Evidence', in *Capitalism in Context: Essays in Economic Development and Cultural Change in Honor of R. M. Hartwell*, ed. John A. James and Mark Thomas (Chicago, 1995), pp. 50-79.

Feinstein, Charles H. 'The Rise and Fall of the Williamson Curve', *The Journal of Economic History*, Vol. 48, No. 3 (1988), pp. 699-729.

Feinstein, Charles. 'New Estimates of Average Earnings in the United Kingdom, 1880-1913', *The Economic History Review*, Vol. 43, No. 4 (1990), pp. 595-632.

Feinstein, Charles. 'A new look at the cost of living 1870-1914', in *New perspectives on the late Victorian economy: Essays in Quantitative Economic History 1860-1914*, ed. James Foreman-Peck (Cambridge, 1991), pp. 151-79.

Feinstein, Charles H. 'Changes in Nominal Wages, the Cost of Living and Real Wages in the United Kingdom over Two Centuries, 1780-1990', in *Labour's Reward, Real Wages and Economic Change in 19th and 20th-Century Europe*, ed. Peter Scholliers and Vera Zamagni (Aldershot, 1995), pp. 3-36.

Feinstein, Charles H. 'Pessimism Perpetuated: Real Wages and the Standard of Living in Britain during and after the Industrial Revolution', *The Journal of Economic History*, Vol. 58, No. 3 (1998), pp. 625-58.

Fleischman, Richard K. *Conditions of Life Among the Cotton Workers of Southeastern Lancashire, 1780-1850* (New York, 1985).

Flinn, M. W. 'Trends in Real Wages, 1750-1850', *The Economic History Review*, New Series, Vol. 27, No. 3 (1974), pp. 395-413.

Floud, Roderick. *The People and the British Economy 1830-1914* (Oxford, 2003).

Floud, Roderick, Kenneth Wachter and Annabel Gregory. *Height, health and history: Nutritional status in the United Kingdom, 1750-1980* (Cambridge, 1990).

Ford, P. 'Excessive Competition in the Retail Trades. Changes in the Numbers of Shops, 1901-1931', *The Economic Journal*, Vol. 45, No. 179 (1935), pp. 501-8.

Ford, P. 'Decentralisation and Changes in the Number of Shops, 1901-1931', *The Economic Journal*, Vol. 46, No. 182 (1936), pp. 359-63.

Ford, P. and G.V. White. 'Trends in retail distribution in Yorkshire (West Riding), 1901-1927', *The Manchester School* (1937), pp. 119-25.

Foreman-Peck, James (ed.). *New perspectives on the late Victorian economy: Essays in Quantitative Economic History 1860-1914*, (Cambridge, 1991).

Freeman, Michael. *Railways and the Victorian Imagination* (New Haven and London, 1999).

Gauldie, Enid. *Cruel Habitations: A History of Working-Class Housing 1780-1918* (London, 1974).

Gazeley, Ian. 'The Cost of Living for Urban Workers in Late Victorian and Edwardian Britain', *The Economic History Review*, Vol. 42, No. 2 (1989), pp. 207-221.

Gourvish, Terence R. *Railways and the British Economy 1830-1914* (London, 1989[1980]).

Gurney, Peter. *Co-operative culture and the politics of consumption in England*, 1870-1930 (Manchester and New York, 1996).

Haines, Michael. 'Inequality and Childhood Mortality: A Comparison of England and Wales, 1911, and the United States, 1900', *The Journal of Economic History*, Vol. 45, No. 4 (1985), pp. 885-912.

Hamish Fraser, William. *The Coming of the Mass Market, 1850-1914* (London, 1981).

Hammond, John L. 'The Industrial Revolution and Discontent', *The Economic History* Review, Vol. 2, No. 2 (1930), pp. 215-28.

Harrison, J. F. C. *Robert Owen and the Owenites in Britain and America: The Quest for the New Moral World* (New York, 2009[1969]).

Hartwell, Ronald M. 'Interpretations of the Industrial Revolution in England: A methodological Inquiry', *Journal of Economic History*, Vol. 19, No. 2 (1959), pp. 229-49.

Hartwell, Ronald M. 'The Rising Standard of Living in England, 1800-1850', *The Economic History Review*, New Series, Vol. 13, No. 3 (1961), pp. 397-416.

Hartwell, Ronald M. 'The Standard of Living', *The Economic History Review*, New Series, Vol. 16, No. 1 (1963), pp. 135-46.

Hartwell, Ronald M. *The Industrial Revolution and Economic Growth* (London, 1971).

Hayek, Friedrich A. ed., *Capitalism and the Historians* (Chicago, 1954).

Hawke, G. R. and M. C. Reed. 'Railway Capital in the United Kingdom in the Nineteenth Century', *The Economic History Review*, New Series, Vol. 22, No. 2 (1969), pp. 269-86.

Hobsbawm, Eric J. 'The British Standard of Living 1790-1850', *Economic History Review*, Vol. 10, No. 1 (1957), pp. 46-68.

Hobsbawm, Eric J. 'The Standard of Living during the Industrial Revolution: A Discussion', *The Economic History Review*, New Series, Vol. 16, No. 1 (1963), pp. 119-34.

Hobsbawm, Eric J. *Labouring Men. Studies in the History of Labour* (London, 1964).

Hobsbawm, Eric J. *The Age of Capital 1848-1875* (London, 2009[1975]).

Hobsbawm, Eric J. *Industry and Empire: The Birth of the Industrial Revolution* (New York, 1999[1968]).

Hollen Lees, Lynn. *The Solidarities of Strangers: The English Poor Laws and the People, 1700-1948* (Cambridge, 1998).

Hone, Angus. 'Reply to Rawick', *International Socialism*, No. 24 (1966), pp. 27-8.

Hosgood, Christopher P. 'The 'Pigmies of Commerce' and the Working-Class Community: Small Shopkeepers in England, 1870-1914', *Journal of Social History*, Vol. 22, No. 3 (1989), pp. 439-60.

Hosgood, Christopher P. 'A 'Brave and Daring Folk'? Shopkeepers and Trade Associational Life in Victorian and Edwardian England', *Journal of Social History*, Vol. 26, No. 2 (1992), pp. 285-308.

Huck, Paul. 'Infant Mortality and Living Standards of English Workers During the Industrial Revolution', *The Journal of Economic History*, Vol. 55, No. 3 (1995), pp. 528-50.

Irving, Robert James. *The North Eastern Railway Company 1870-1914* (Leicester, 1976).

Kumar Kesari, Kavindra, Ruchika Handa and Ranu Prasad. 'Effect of Undernutrition of Cognitive Development of Children', *International Journal of Food, Nutrition and Public Health*, Vol. 3, No. 2 (2010), pp. 133-48.

Jefferys, James B. *Retail trading in Britain 1850-1950: A study of trends in retailing with special reference to the development of Co-operative, multiple shop and department store methods of trading* (Cambridge, 1954)

Jennings, H. Lincoln. 'The Co-operative Wholesale Society Ltd', *Annals of Public and Cooperative Economics*, Vol. 20, No. 1 (1949), pp. 25-43.

Johnston, James P. *A Hundred Years Eating: Food, Drink and the Daily Diet in Britain since the late Nineteenth Century* (Montréal, 1977).

Johnson, Paul and Stephen Nicholas, 'Male and Female Living Standards in England and Wales, 1812-1857: Evidence From Criminal Height Records', *The Economic History Review*, New Series, Vol. 48, No. 3 (1995), pp. 470-81.

Jones, Ronald. 'Consumers' Co-Operation in Victorian Edinburgh: The Evolution of a Location Pattern', *Transactions of the Institute of British Geographers*, New Series, Vol. 4, No. 2 (1979), pp. 292-305.

Komlos, John. 'The Secular Trend in the Biological Standard of Living in the United Kingdom, 1730-1860', *The Economic History Review*, New Series, Vol. 46, No. 1 (1993), pp. 115-44.

Lefebvre, Henri. *The Production of Space*, Trans. Donald Nicholson-Smith, (Oxford, 2002[1974]).

Lindert, Peter H. and Jeffrey G. Williamson, 'English Workers' Living Standards during the Industrial Revolution: A New Look', *The Economic History Review*, New Series, Vol. 36, No. 1 (1983), pp. 1-25.

Lindert, Peter H. and Jeffrey G. Williamson, 'English Workers' Real Wages: Reply to Crafts', *The Journal of Economic History*, Vol. 45, No. 1 (1985), pp. 145-53.

Mason, Tony. *Association Football and English Society, 1863-1915* (Brighton, 1980).

Mathias, Peter. *Retailing Revolution: A History of Multiple Retailing in the Food Trades based upon the Allied Suppliers Group of Companies* (London, 1967).

McIvor, Arthur. *A History of work in Britain, 1880-1950* (Basingstoke, 2001).

McNally, David. *Bodies of Meaning: Studies on Language, Labor, and Liberation* (New York, 2001).

McNamee, Betty. 'Trends in Meat Consumption', in *Our Changing Fare: Two Hundred Years of British Food Habits*, ed. T. C. Barker, J. C. McKenzie and J. Yudkin (London, 1966), pp. 77-93.

Meiksins Wood, Ellen. 'The Question of Market Dependence', *Journal of Agrarian Change*, Vol. 2, No. 1 (2002), pp. 50-87.

Millward, Robert and Frances Bell. 'Infant Mortality in Victorian Britain: The Mother as Medium', *The Economic History Review*, Vol. 54, No. 4 (2001), pp. 699-733.

Mokyr, Joel. 'Has the Industrial Revolution been Crowded Out? Some Reflections on Crafts and Williamson', *Explorations in Economic History*, Vol. 24, No. 3 (1987), pp. 293-319.

Mokyr, Joel. 'Is There Still Life in the Pessimist Case? Consumption during the Industrial Revolution, 1790-1850', *The Journal of Economic History*, Vol. 48, N. 1 (1988), pp. 69-92.

Moore, W. J. 'Dental caries in Britain from Roman times to the nineteenth century', in *Food, Diet and Economic Change Past and Present*, ed. Catherine Geissler and Derek J. Oddy (London, 1993), pp. 50-61.

Morris, Morris D. *Measuring the Conditions of the World's Poor: The Physical Quality of Life Index* (New York, 1979).

Neale, R. S. 'The Standard of Living, 1780-1844: a Regional and Class Study, *The Economic History Review*, New Series, Vol. 19, No. 3 (1966), pp. 590-606.

Neale, R. S. *Bath: A Social History 1680-1850, or A Valley of Pleasure, yet a Sink of Iniquity* (London, 1981), pp. 79-94.

Neale, R. S. *Writing Marxist History* (Oxford, 1985).

Nicholas, Stephen and Deborah Oxley. 'The Living Standards of Women during the Industrial Revolution, 1795-1820', *The Economic History Review*, New Series, Vol. 46, No. 4 (1993), pp. 746.

Nicholas, Stephen and Richard H. Steckel. 'Heights and Living Standards of English Workers During the Early Years of Industrialization, 1770-1815', *The Journal of Economic History*, Vol. 51, No. 4 (1991), pp. 937-57.

Oddy, Derek J. 'Working-Class Diets in Late Nineteenth-Century Britain', *The Economic History Review*, Vol. 23, No. 2 (1970), pp. 314-23.

Oddy, Derek J. 'The Health of the people', in *Population and Society in Britain 1850-1980*, ed. Theo Barker and Michael Drake (London, 1982), pp. 121-9.

Oddy, Derek J. 'Urban Famine in Nineteenth-Century Britain: The Effect of the Lancashire Cotton Famine on Working-Class Diet and Health', *The Economic History Review*, Vol. 36, No. 1 (1983), pp. 68-86.

Oddy, Derek J. 'Food, drink and nutrition', in *The Cambridge Social History of Britain 1750-1950, Volume 2*, ed. Francis M. L. Thompson (Cambridge, 1990), pp. 267-73.

Oddy, Derek J. 'The paradox of diet and health: England and Scotland in the nineteenth and twentieth centuries', in *Order and Disorder: The Health Implications of Eating and Drinking in the Nineteenth and Twentieth Centuries*, ed. Alexander Fenton (East Linton, 2000), pp. 45-63.

Oddy, Derek J. *From Plain Fare to Fusion Food: British Diet from the 1890s to the 1990s* (Woodbridge, 2003).

Oren, Laura. 'The Welfare of Women in Laboring Families: England, 1860-1950', *Feminist Studies*, Vol. 1, No. 3/4 (1973), pp. 107-25.

Osborne, Harvey and Michael Winstanley. 'Rural and Urban Poaching in Victorian England', *Rural History*, Vol. 17, No. 2 (2006), pp. 187-212.

Palmer, Sarah. *Politics, Shipping and the repeal of the navigation laws* (Manchester, 1990).

Pennybacker, Susan D. *A Vision for London 1889-1914: labour, everyday life and the LCC experiment* (London, 1995).

Perren, Richard. *The Meat Trade in Britain 1840-1914* (London, 1978).

Perren, Richard. 'Structural Change and Market Growth in the Food Industry: Flour Milling in Britain, Europe, and America, 1850-1914', *The Economic History Review*, New Series, Vol. 43, No. 3 (1990), pp. 420-37.

Phillips, Martin. 'The evolution of markets and shops in Britain', in *The evolution of retail systems, c.1800-1914*, ed. John Benson and Gareth Shaw (Leicester, 1992), pp. 53-75.

Polanyi, Karl. Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Time* (Boston, Ma, 2001[1944]).

Pollard, Sidney. 'Nineteenth-century co-operation: from community building to shopkeeping', in *Essays in Labour History*, ed. Asa Briggs and John Saville (London, 1960), pp. 74-112.

Purvis, Martin. 'Co-operative retailing in Britain', in *The evolution of retail systems, c.1800-1914*, ed. John Benson and Gareth Shaw (Leicester, 1992), pp. 107-34.

Purvis, Martin. 'Societies of consumers and consumer societies: co-operation, consumption and politics in Britain and continental Europe *c.* 1850-1920', *Journal of Historical Geography*, Vol. 24, No. 2 (1998), pp. 147-69.

Purvis, Martin. 'Stocking the store: co-operative retailers in North-east England and systems of wholesale supply, circa 1860-77', *Business History*, Vol. 40, No. 4 (1998), pp. 55-78.

Riggs, Paul. 'The Standard of living in Scotland 1800-1850', in *Stature, Living Standards and Economic Development: Essays in Anthropometric History*, ed. John Komlos (Chicago, 1995), pp. 60-75.

Roberts, Elizabeth. *A Woman's Place: An Oral History of Working-Class Women 1890-1940* (Oxford and Cambridge, 1995 [1984].

Roberts, Robert. *The Classic Slum: Salford Life in the First Quarter of the Century* (London, 1990 [1971]).

Robinson, Robb. *Trawling: The Rise and Fall of the British Trawl Fishery* (Exeter, 1996).

Romer, Carrol. *The Metropolitan Traffic Manual, containing the Law relating to Road, River and Air Traffic in London and elsewhere* (London, 1922).

Ross, Ellen. *Love and Toil: Motherhood in Outcast London, 1870-1918* (Oxford, 1993).

Schmiechen, James and Kenneth Carls, *The British Market Hall: A Social and Architectural History* (New Haven and London, 1999).

Schroeder, Henry A. 'Losses of vitamins and trace minerals resulting from processing and preservation of foods', *The American Journal of Clinical Nutrition* (1971), pp. 562-73.

Scola, Roger. 'Food markets and shops in Manchester 1770-1870', *Journal of Historical Geography*, Vol. 1, No. 2 (1975), pp. 153-68.

Scola, Roger. *Feeding the Victorian city: the food supply of Manchester, 1770-1870* (Manchester, 1992).

Shaw, Gareth. 'Changes in consumer demand and food supply in nineteenth-century British cities', *Journal of Historical Geography*, Vol. 11, No. 3 (1985), pp. 280-96.

Shaw, Gareth. 'The evolution and impact of large-scale retailing in Britain', in *The evolution of retail systems, c.1800-1914*, ed. John Benson and Gareth Shaw (Leicester, 1992), pp. 135-65.

Shaw, Gareth and M. Trevor Wild, 'Retail Patterns in the Victorian City', *Transactions of the Institute of British Geographers*, New Series, Vol. 4, No. 2 (1979), pp. 278-91.

Simeon, Donald T. and Sally Grantham-McGregor. 'Effects of missing breakfast on the cognitive functions of school children of differing nutritional status', *The American Journal of Clinical Nutrition*, Vol. 49 (1989), pp. 646-53.

Smith, Colin. 'The Wholesale and Retail Markets of London, 1660-1840', *The Economic History Review*, Vol. 55, No. 1 (2002), pp. 31-50.

Smith, J. H. 'The Cattle Trade of Aberdeenshire in the Nineteenth Century', *The Agricultural History Review*, Vol. 3, No. 2 (1955), pp. 114-8.

Soloway, Richard. 'Counting the Degenerates: The Statistics of Race Deterioration in Edwardian England', *Journal of Contemporary History*, Vol. 17 (1982), pp. 137-64.

Stedman Jones, Gareth. *Outcast London: a study in the relationship between classes in Victorian society* (Oxford, 1971).

Szreter, Simon and Graham Mooney. 'Urbanization, Mortality, and the Standard of Living Debate: New Estimates of the Expectation of Life at Birth in Nineteenth-Century British Cities', *The Economic History Review*, New Series, Vol. 51, No. 1 (1998), pp. 84-112.

Taylor, A. J. (ed.) *The Standard of Living in Britain in the Industrial Revolution* (London, 1975).

Taylor, David. 'London's Milk Supply, 1850-1900: A Reinterpretation', *Agricultural History*, Vol. 45, No. 1 (1971), pp. 33-8.

Taylor, David. 'Beyond the Bounds of Respectable Society: The "Dangerous Classes" in Victorian and Edwardian England', in *Criminal Conversations: Victorian Crimes, Social Panic, and Moral Outrage*, ed. Judith Rowbotham and Kim Stevenson (Columbus, 2005), pp. 3-22.

Thomas, John Birch. *Shop Boy: An Autobiography* (London, 1983).

Thompson, Edward P. *The Making of the English Working Class* (Harmondsworth, 1968).

Thompson, Edward P. 'The Moral Economy of the English Crowd in the Eighteenth Century', *Customs in Common: Studies in Traditional Popular Culture* (New York, 1993), pp. 185-258.

Thompson, Edward P. 'The Moral Economy Reviewed', *Customs in Common: Studies in Traditional Popular Culture* (New York, 1993), pp. 259-351.

Torode, Angeliki. 'Trends in Fruit Consumption', in in *Our Changing Fare: Two Hundred Years of British Food Habits*, in Theodore C. Barker, John C. McKenzie and John Yudkin (London, 1966), pp. 115-34.

Von Tunzelmann, G. N. 'Trends in Real Wages, 1750-1850, Revisited', *The Economic History Review*, New Series, Vol. 32, No. 1 (1979), pp. 33-49.

Waddington, Keir. *The Bovine Scourge: Meat, Tuberculosis and Public Health, 1850-1914* (Woodbridge, 2006).

Walton, John K. *The English seaside resort: a social history, 1750-1914* (Leicester, 1983).

Walton, John K. *A Social History of Lancashire, 1558-1939* (Manchester, 1987).

Walton, John K. *Fish and Chips and the British Working Class, 1870-1940* (Leicester, 1992).

Walton, John K. 'Towns and Consumerism', in *The Cambridge Urban History of Britain*, Volume III: 1840-1950, ed. Martin Daunton (Cambridge, 2000), pp. 715-44.

Walton, John K. 'Book Review', *From Plain Fare to Fusion Food: British Diet from the 1890s to the 1990s*', Institute of Historical Research on-line reviews, No. 350, http://www.history.ac.uk/reviews/review/350.

Walvin, James. *Beside the Seaside: Social History of the Popular Seaside Holiday* (London, 1978).

Webb, Sidney and Beatrice Webb. 'The Assize of Bread', *The Economic Journal*, Vol. 14, No. 54 (1904), pp. 196-218.

Whetham, E. H. 'The London Milk Trade, 1860-1900', *The Economic History Review*, New Series, Vol. 17, No. 2 (1964), pp. 369-80.

Wild, M. Trevor and Gareth Shaw. 'Population distribution and retail provision: The case of the Halifax-Calder Valley area of West Yorkshire during the second half of the nineteenth century', *Journal of Historical Geography*, Vol. 1, No. 2 (1975), pp. 193-210.

Williamson, Jeffrey G. 'Urban Disamenities', *Journal of Economic History*, Vol. 41 (1981), pp. 75-83.

Williamson, Jeffrey G. 'Was the Industrial Revolution Worth It? Disamenities and Death in 19th Century British Towns', *Explorations in Economic History*, Vol. 19 (1982), pp. 221-45.

Winstanley, Michael. *The shopkeeper's world 1830-1914* (Manchester, 1983).

Winstanley, Michael. 'Concentration and competition in the retail sector *c.*1800-1990', in *Business enterprise in modern Britain: From the eighteenth to the twentieth century*, ed. Maurice W. Kirby and Mary B. Rose (London and New York, 1992), pp. 236-62.

Wohl, Anthony S. *The Eternal Slum: Housing and Social Policy in Victorian London* (Montréal, 1977).

Wohl, Anthony S. *Endangered Lives: Public Health in Victorian Britain* (London, 1983).

Woods, Robert. 'The Effects of Population Redistribution on the Level of Mortality in Nineteenth-Century England and Wales', *The Journal of Economic History*, Vol. 45, No. 3 (1985), pp. 645-51.

Woods, Robert I, Patricia A. Watterson and John H. Woodward. 'The Causes of Rapid Infant Mortality Decline in England and Wales, 1861-1921, Part I', *Population Studies*, Vol. 42, No. 3 (1988), pp. 343-66.

Woods, Robert I, Patricia A. Watterson and John H. Woodward. 'The Causes of Rapid Infant Mortality Decline in England and Wales, 1861-1921, Part II', *Population Studies*, Vol. 43, No. 1 (1989), pp. 113-32.

Wrigley, Edward A. and Roger Schofield. *The Population History of England 1541-1871: A Reconstruction* (Cambridge, 1981).

Yeo, Stephen. ed., *New Views of Co-operation* (London, 1988).